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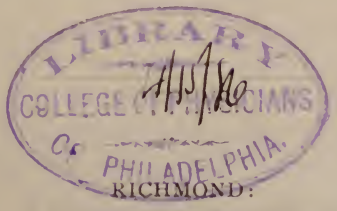

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ART. I.—**Mammary Lesions during Lactation.*** By HENRY P. WENZEL, M. D., President Rock River Medical Society, etc., Milwaukee, Wisconsin.

Lesions of the mammary glands are of frequent occurrence during gestation, and especially so during lactation. Abrasions, erosions and fissures of the nipple are not only painful incidents during the nursing period, but often, also, the forerunners of inflamed breasts and ulcers, and rarely, as an eczematous eruption, portend cancer later on. (Sir James Paget, Billroth, von Winniwarter, and others.) In many instances, a neglected sore nipple is followed by extensive destruction of the gland itself, or of the tissues around it. And the exquisite pain caused by the brutal removal of the milk is scarcely less than that of a "caked breast" or abscess.

The mammary gland belongs to the compound racemose type, and, with its appendages, is part of the beauty of the female bust; and its utility in furnishing pabulum for the young infant is of prime importance. When physiological function is interfered with by abrasions, erosions or fissures

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of the nipple; by external influences, as by chilling, friction, or other injury; by internal causes, as defective milk-ducts, compression of the ducts from tumors, etc., preventing the escape of the lacteal fluid—a pathological condition rapidly supersedes the physiological function; and if the cause and source of irritation be not quickly removed, inflammation supervenes with all its depressing influences. And if active inflammatory conditions are not rapidly checked, suppuration, with all its agonies, impairs or destroys the usefulness of the breast, and mars the beauty of the female form.

In primipara, a peculiar irritability frequently develops milk before labor, and the nipple is soft, and the epithelium easily abraded, or cracked—conditions I have observed in several instances. Generally the nipple is not only tender, but very short, making nursing difficult when the breast is tense and turgid with milk. This can be corrected with astringent lotions, and by gentle manipulation and traction the nipple can be hardened and elongated for the benefit of the infant and comfort of the mother. In the large majority of cases *ante*-partum attention prevents *post*-partum trouble.

Shortly after labor—within two hours—the infant should be applied to the breast and coaxed to nurse. Two points are gained by this procedure—the nipple is "drawn out" before the breast is distended and tense, and uterine contraction is assured by the reflex effect of nursing. The breast-pump is a useless device to draw out the nipple, and certainly, from its construction, draws but little milk, and that with much pain. The pump constricts the ducts at the base of the nipple, and pulling the nipple upward unduly stretches the tender skin, and produces small cracks—the beginning of trouble. *I emphatically forbid the use of breast-pumps.*

After each nursing, the mother should be instructed to dry the nipple with absorbent cotton or soft flannel, for frequently the moisture becomes sour and the epithelium is macerated, and abrasions or erosions are produced; or, if the tissues pucker, the moisture gathers in the depressions, and by decomposing the tender epithelium, fissures are produced. When the nipple is sore, nursing becomes very

painful, and the mother avoiding pain by not allowing the infant to nurse, "caking" follows. Lotions of borax, lead, zinc, tannin, hydrastis, etc., applied after each sucking act, generally checks the trouble; and if fissured, lunar caustic should be lightly applied to the cracks. For the safety of the child, the nipple should be cleansed before each nursing period. If the nipple is very sore, rest for a few days, with close attention to the nipple, and a six-tailed bandage securing the breast, will restore the organ to a normal condition.

If the breast becomes hard, tense, painful and much swollen, elevation and compression generally produce relief and cure. It is of little moment whether pus forms beneath, in or upon the gland—there will be marked constitutional disturbance. But while some patients suffer excruciating agonies with a slight inflammation, others scarcely complain of pain, although the whole gland may be destroyed by suppuration. I repeat, local attention generally prevents such grave trouble; astringent applications as indicated, and, if necessary, rest, abort inflamed breasts. Glycerine should not be used.

If the gland should be in an advanced state of irritability, the "granny" will poultice, and the substances used are legion; but the application of the poultice adds increased weight to the heavy, dependent breast, and the pain becomes severe, and is attributed to "matter in the breast," which "when the breast is broke, will be dischrrged, and the pain stops." Thus reason the wise and good (?) grannies found every where! Yet how fallacious; how easily disproved by simple methods avoiding filth, inconvenience, weight!

Compression and elevation are the potent factors in sore or inflamed breasts. Various substances have been used—sponge, adhesive strips, roller bandages applied in different ways, etc. Some of these cannot be accurately applied, and others are either difficult to apply or painful to remove. The dressing should be easily coapted, simple, painless, and should elevate and compress the enlarged and painful gland, removing tension, relieving suffering by a poultice and anodyne, and cause the milk to drain away without pain. This can be attained by a modified six-tailed bandage, which also

keeps the breast immovable The bandage is easily adjusted, easily removed, cannot get out of order, and if it becomes loosened, the patient or her attendants can tighten it. Any kind of goods, obtainable any where, may be used.

The bandage is made as follows: Take any kind of cloth material (muslin, sheeting, flannel, calico, etc.), long enough to reach around the body, and four-fifths the width of the affected gland from base to base; cut a hole in the centre for the nipple, tear each end into three tails to within two inches of the middle, and the bandage is done. Elevate the breast upwards and inwards, pass the nipple through the hole in the centre, fasten the lower tails first—passing one over the opposite shoulder, the other beneath the axilla of the same side—and secure them behind with pin, button or buckle; now secure the upper tails around the lower part of the thorax; and lastly, pass the middle tails horizontally around the thorax, on a line with the nipple. Secure the breast snugly, and your patient will experience immediate and marked relief, and the doctor will be gratified with a magic-like success. If carefully applied, it will stop pain, reduce the swelling, and if necessary the infant may nurse without interfering with the dressing at all. However, I prefer to give the "sore" breast a little rest until the pain and swelling subside before the child is allowed to nurse. If the gland is full of milk, the bandage snugly applied will, by gentle compression, empty it without pain; and I do not permit any other method to empty the breast. In cases of inflamed breasts, all breast-pumps *do more harm than good.* If desirable, a poultice may be applied with the bandage, as may also lotions, etc.

The *best* local remedies are iodide of lead with or without opium, belladonna, conium, or lead-water, opium, and tincture of aconite root, equal parts. If poultices are required, flax seed, slippery-elm bark, comfrey, yeast, etc., with or without opium or laudanum, are valuable agents to assuage pain, provided the breast is elevated; but if these are too long applied, they will do harm. If the Doctor is called in time, the careful application of the six-tailed bandage above is all that is required. It frequently happens, however, that

a breast has been treated in every conceivably way before medical aid is summoned, and then our mode of treatment will be valuable aid in restoring the inflamed and abused breasts. Although suppuration may have taken place, the bandage can still be used advantageously.

The internal administration of poke-root has given negative results in some cases. Aconite and quinia, if necessary, combined with opium, and later, sulphide of lime if suppuration follows, should be given. Iron and strychnia are invaluable. The bowels should be regulated with salines. Each case must be treated on its own merits.

Should suppuration be unavoidable, the pus should be let out as soon as possible, and the incisions should be made to interfere as little as possible with the function or form of the breast. In this age of antiseptics, it is needless to suggest remedies for the healing process. Compression and elevation are the essentials after abscesses are opened; pocketing and burrowing of pus are prevented by every application of the bandage described, which at the same time secures the medicaments, and retains them when desired.

I append notes of a few cases which have occurred in my practice:

I. Mrs. R., æt. 37, mother of seven children, was in good health until four months after labor. There was some malaise, but neither pain nor fever. When I was called to attend her, the whole left breast was soft and fluctuating, and incision allowed a large quantity of pus and tissue-shreds to escape; the whole gland had been destroyed by suppuration. After-treatment, carbolized cosmoline. Patient claimed to have had neither pain, anorexia nor insomnia.

II. Mrs. F., æt. 40, mother of ten children. Her right breast became "sore" two weeks after labor. Patient claims to have had no pain, good appetite, sleep, etc. She treated it herself "with everything," but the "breast broke and mattered a long while." When I examined the woman there was a thick, irregular cicatrix but no gland tissue—the whole gland was destroyed.

III. Mrs. Z., æt. 37, mother of seven children, called to get a prescription for a "lump" in her left breast, which came six months after her last child was born seven years ago. From her description, there was eczema of the nipple and

areola while nursing the child. The "lump" was small at first, but gradually enlarged and became painful. The breast is larger than its mate; the nipple is drawn inward; the tumor is as large as a goose egg and the surrounding tissues are infiltrated; the skin over the tumor is bluish and adherent; there is slight pain on pressure, and at times sharp, darting pains radiate from the tumor; the axillary glands are enlarged and tender. Her general appearance is fair, her appetite variable, her sleep disturbed. Diagnosis: Carcinoma. Advised extirpation of the whole breast and axillary glands without delay. Operation refused. A year later the patient died of cancer.

IV. Mrs. W., æt. 29, mother of one child, had very tender nipples, and nursing caused severe pain. When I saw the case both breasts were enormously swollen, tender on pressure, and distinct traces of fluctuation were evident in both breasts. Two days after labor, the nipples were tender and rapidly abraded, and now, six days later, there is severe constitutional disturbance. Pain, insomnia, anorexia, profuse perspiration, high fever, galloping pulse, show a picture of misery. Ordered flax-seed poultices with laudanum locally, and quinia and Dover's powder internally. Next day I opened three abscesses in one, and two in the other breast, and quantities of milk, pus, and tissue-shreds escaped. Carbolized dressing and the six-tailed bandage constituted the dressing and the glands healed kindly. The patient has since been thrice confined, and there has been nothing abnormal in the lactation period.

V. Mrs. B., æt. 20, mother of one child, had fissured nipples and "caked" breasts two weeks after confinement. I touched the fissures with silver nitrate and compressed both mammæ with adhesive strips. They caused so much pain that I had to remove them. I then applied a six-tailed bandage to each breast. Marked improvement resulted in twenty-four hours, and complete recovery without suppuration in four days. Lactation normal subsequently.

VI. Mrs. W., æt. 20, mother of one child, suffers because of large quantities of milk continuously escaping. She kept the nipples moist; erosions followed, and pain, tenderness and swelling of both mammæ made nursing exquisitely painful. Unguentum plumbi iodidi was smeared over both breasts; tannin was applied to the nipples, and each breast was tightly compressed with the six-tailed bandage; nursing was interdicted for four days. Recovery in six days; no further trouble.

VII. Mrs. P., æt. 20, mother of three children, had fissured nipples three weeks after labor, and the breasts were swollen and painful. When I saw the case the first time the fissures were lightly cauterized with silver nitrate, and a six-tailed bandage snugly secured each breast. At my next call, two days later, I found that a "granny" had removed the bandages and poulticed both mammæ with "tobacco and raisins which will cure them!" Fluctuation was distinct in both breasts. Incisions were refused, and I declined further attendance. Several colleagues saw the case, but were also refused to let out the pus. Finally both breasts "broke" and were practically destroyed by suppuration—lactation being impossible at subsequent labors.

VIII. Mrs. V., æt. 24, mother of three children. A few days after the last birth she had "sore" nipples, causing severe pain while nursing the child. The breasts became enlarged and painful; there occurred, also, anorexia, insomnia, fever, excessive perspiration, with agonizing pain whilst nursing, followed; and lotions, salves, plasters and poultices devised by "grannies" failed to relieve her. I was called five weeks after labor and found her emaciated, sweating profusely, with high fever, rapid, feeble pulse, and excruciating pain; she could neither eat nor sleep. Her right breast was the largest I ever saw, measuring thirty inches around its base and elongated in proportion. It was dusky colored and hard to the touch. Manipulation, pipe- and breast-pumps had been used to extract milk and failed, and the procedure had caused agonizing misery. The left breast was somewhat enlarged, hard, very tender; nursing was impossible. I ordered quinia and opium internally, and lead iodide with extract of belladonna ointment locally, and applied a perforated six-tailed bandage firmly to each breast. The pain diminished at once. Next morning the bandages and her clothing were saturated with acid milk. There was no pain. Fluctuation could not be detected in either breast. The bandages were re-applied —all medicines stopped. Twenty-four hours later, the bandage and clothing were again saturated with milk, and the left breast was normal; but there was distinct fluctuation in the right breast above and below the nipple and under the gland near the outer border. The mamma was raised inward and upward, and a two-inch incision near the pectoral attachment let out over a quart of pus and connective tissue shreds. A rubber drain was introduced and secured and a six-tailed bandage was applied, holding a large carbolized sponge to catch the discharges. Next day the sponge was saturated

with pus; fluctuation was less distinct above the nipple, and the whole breast was much smaller. The same treatment was continued until the wound closed. The circumference of the breast was reduced from 30 to 11½ inches. Lactation became normal in both mammæ.

At a subsequent parturition the patient had another onset of inflamed breasts, but the prompt use of the six-tailed bandage checked the trouble and lactation was not interfered with.

IX. Mrs. W., æt. 19, seven days after her first labor, had a severe chill, followed by fever, bounding pulse, profuse perspiration, anorexia, insomnia and severe pain in both breasts. The breasts were turgid, hot, tense, dusky colored; nursing caused exquisite pain; there were no abrasions, erosions or fissures. The six-tailed bandage was snugly applied to both mammæ, and in three days both breasts were normal and lactation was continued uninterruptedly. Save a bottle of citrate of magnesia, no medicine was taken.

X. Mrs. S., æt. 30, mother of four children, had a dry labor in her last confinement, lasting four hours. On the fourth day, two sharp chills, followed by high fever, extremely rapid, bounding pulse, and profuse perspiration set in. Both breasts were dark red in color, very hard and painful at intervals, simulating neuralgia, and nursing caused misery indeed. Locally the six-tailed bandage was snugly and firmly applied to each breast, and lessened the agony at once. Internally, quinia, Dover's powder and citrate of magnesia. Treatment was continued two days, when resolution resulted and lactation returned uninterruptedly and normally.

In conclusion, let me repeat: Treat the cases promptly and thoroughly as soon as you are called in, and then the medical attendant can rapidly relieve suffering, promote recovery, prevent deformity, hinder injury to normal function, and gain the esteem and gratitude of his patients.

296 *West Water Street.*

An Absent-Minded Woman in Kentucky put a corn-plaster on a letter, and stuck a postage stamp on her toe. The letter is "dead," but the corn is alive.

ART. II.—**Germs, Germicides, and Listerism.** By M. G. ELLZEY, M. D., Professor of Chemistry and State Medicine, Medical Department of Georgetown University, etc., Washington, D. C.

Much is known, more remains unknown, concerning certain living organisms low in the scale of life, popularly styled "germs." All these forms, so far as known, belong to a certain class of vegetable organisms allied to fungi; no animalculæ are known among them. Technically they are divided into micrococci, round or oval in shape, and bacilli, filliform or rod-like shapes. Some of these forms produce spores, or seed; others do not. The spores possess much greater powers of resistance to the action of destructive agents than the mature organisms.

Some of these micrococci and bacilli are known to possess pathogenic powers; some of them are known not to possess any such powers, and with regard to others still, the question remains in doubt. Bacillus anthracis and bacillus tuberculosis are known to produce anthrax and tuberculosis when introduced into the living body under conditions favorable to their nutrition, development and reproduction. With regard to the so-called comma bacillus, it remains in doubt whether it produces cholera.

Whether, in the case of pathogenic bacilli the bacillus itself be the materies morbi, or whether the materies morbi be an excretory product of the nutrition of the bacillus, in the nature of a formless ferment, is not certainly known, nor practically is it a matter of great importance. Some bacilli known to possess frightful pathogenic powers are not morphologically to be distinguished from others known to possess no such powers.

Micrococci and bacilli differ among themselves in resisting power against the destructive action of germicides, and the spores are in all cases far more tenacious of life than the parent organisms, as already remarked. Many micrococci and bacilli die in fluids at temperatures above 140° F.; all die in fluids at 212° F., but resist much greater dry heat. Spores generally survive in heated fluids until the temperature reaches 228° F., when all die. Fluids heated to 228° F. are

absolutely and completely sterilized by five minutes' exposure in all cases.

Solutions of certain substances of definite strength completely and certainly destroy all germs and spores. Corrosive sublimate, one part to one thousand of solvent, destroys all known germs and spores; when in the proportion of one part to ten thousand of water, it destroys all known micrococci and bacilli. But micrococci and bacilli fail to develop in solutions of reduced strength, in which, nevertheless, they continue to live and retain the power to develop and multiply rapidly when transferred to more favorable media.

The distinction, therefore, between germicides and antiseptics is very broad and distinct. Some substances are found to be antiseptic but not germicidal, even in full strength or saturated solution. Alcohol, for example, is a common preservative of anatomical specimens after large dilution, but absolute alcohol fails entirely to destroy bacilli and micrococci or their spores. When we come to apply facts such as the foregoing to the practice of surgery, under the name and style of Listerism, we come to the conclusion that no known reliable germicide can be applied safely to any wound in solutions of germicidal strength, any more than we can apply a fluid at a temperature of 228° F. as a wound-dressing. It can not be thought safe to apply to any wound a solution of corrosive sublimate of the strength of one grain to the fluid ounce as a common dressing.

It must be kept in mind that all germicides are antiseptic in reduced strength of solution, but many antiseptics are not germicides at all. Solutions of sulphuric and nitric acid of eight per cent., and hydrochloric acid of fifteen per cent., are germicidal. These acids are antiseptic in solutions of one per cent., or even less. It is clear that no safe line can be established between germicidal and homicidal medicine or surgery. The legitimate field of Listerism is restricted to asepticism, as contradistinguished from germicidal and antiseptic applications. The spraying of operating rooms and wounds with carbolic acid takes rank henceforth as a solemn farce. Carbolic acid is not germicidal below the strength of a ten per cent. solution. Fancy an operating-room, of which

the atmosphere is a ten per cent. carbolic acid vapor-bath. Fancy some woman's abdomen laid wide open, and all its contents made a ten per cent. carbolic acid pickle and then sewed up. The best and the worst of Listerism is, as I believe, cleanliness in all things—pure and absolute. We are to keep the dreaded germs away from about our patients and out of our wounds, but we are not to essay to kill them in our wounds. Too often in such case the germs will die and the patient die.

When I make a superficial surgical wound, as for removal of a tumor, say from the face, first, I thoroughly wash my hands with soap and warm water; I place all instruments, including needles with silk, ligatures, sponges, etc., in a ten per cent. solution of carbolic acid; I pass each of these through hot water before I use them. The dissection complete, I sew up the wound, clip the sutures close, wash the wound and surrounding surface clean with hot sponges, apply a good pad of absorbent cotton, held in place by strips of isinglass plaster, which I soften after they are applied with a touch of vaseline. I leave the cotton in place until I see cause to remove it, or until I intend to take out the sutures. I commonly find the wound healed by first intention, without the formation of twenty drops of pus. I remove the sutures, apply a light pledget of absorbent cotton, fastened on with isinglass plaster, and when this comes off the healing is complete and no further dressing is applied. This I hold to be aseptic surgery. I do not find it necessary to kill any germs, for there are none in the wound.

For hospital use and for public sanitation, after all that has been said, the old-fashioned liquor sodæ chlorinatæ is perhaps the most efficient, cheapest and best, safe disinfectant for general use; solution of chloride of lime is almost equally good and reliable. Sprinkling of various stuffs, with a view to purifying and disinfecting the air, are useless and hurtful, by loading the atmosphere with foreign substances, and to that extent devitalizing it and depriving it of its full power to maintain all the vital energies at their maximum, this being, perhaps, the very best and most potent antiseptic power in nature. We can not shut our eyes to the fact that

a condition of vital depression will often arise in spite of all we know how to do, when all hope of preserving life will depend on our success in reinforcing all the vital energies in their desperate battle with death. In dampness, darkness and filth, the whole germs of micrococci and bacilli thrive. In broad sunlight, in dry, pure air and clean surroundings, they perish. Yes, Dr. Hunter McGuire said rightly, during the session of the Medical Society of Virginia last fall, that in the life-giving air of those grand old mountains about Rawley Springs, Va., reinforced by cleanliness immaculate, is to be found the *magna pars*—the very soul of Listerism.

The first principle of Listerism is to place the patient in the midst of sanitary surroundings the most perfect attainable; and the second is like unto it—keep him in the midst of such surroundings. Listerism is the personal application to the surgical patient of the established principles of modern sanitary science, and it is, if I comprehend it, nothing more. The mere local barrier against the introduction of septic germs had best be the lightest screen in the way of a dressing, the securest and most comfortable, which the ingenuity of the surgeon can devise, and it should not be removed without cause. It is doubtful whether anything more effectual, or safer and better in itself for such a purpose, can be thought of than clean absorbent cotton, which is, in my judgment, a perfect barrier against the access of all germs and spores, if properly applied.

Listerism embraces other and more essential precautions. In every sick room, in every hospital ward, all dejecta should be received into vessels containing a germicidal solution, which is also a perfect deodorizer. A bad smell is in itself a depressing influence and a devitalizer of the air. I use a saturated solution of alum and sulphate of copper in the vessel into which the dejecta are received as they pass from the patient. This solution is a perfect deodorizer, and the contents of the vessel are immediately brought to a germicidal strength by addition of 8 per cent. of sulphuric acid. In typhoid fever, dysentery, and other diseases, I have followed this practice for years, with the best results, as I believe. After all said and done, the surgeon is something more than

a germ slayer; Listerism is as easily overdone as underdone. Let me repeat it: Where there is a bad smell to deal with, a deodorizer, as well as a germicide, is demanded. Listerism calls for germicides, antiseptics, deodorizers, and aseptic precautions and appliances under the guidance of profound scientific knowledge of the whole subject, and at the same time of what Tennyson has so well styled, in his great ode—"Saving common sense."

I wish to be plainly understood as striking at the germicidal idea in medicine and surgery and all branches thereof as applied to the person of the patient. My contention is for the aseptic in contradistinction from the germicidal and antiseptic methods. You cannot make of the blood of your patient a germicidal solution, nor of any of his organs and tissues a germicidal pickle until after he is dead. Your patient has about forty pounds of circulating fluid, as I think. How much corrosive sublimate would make these forty pounds a germicidal solution? One to forty of carbolic acid is feebly antiseptic. Think of putting a pound of carbolic acid into circulation in the veins of a living man! Reserve germicides for application to limited quantities of suspicious matter apart from the person. Remember, furthermore, atmospheric germs are not to be destroyed by sprays nor sprinkling, nor dry heat, nor germicidal gas, neither by sulphurous acid nor chlorine. Disinfect all slops, waste materials, food residues, dirt, excreta, and promptly carry out the same, and further, effectually destroy them. Every hospital ought to have a crematory attachment for this very purpose. Bring in pure, fresh air abundantly; exclude sewer air and ground air absolutely. See to it that the water supply is above suspicion in every respect. The food is to be fresh, clean, sound, and well cooked—no raw meat, no withered vegetables, no mouldy, old bread. Milk is always open to suspicion; watch the milk. These precautions being taken, wash your hands, clean your instruments, and proceed to operate on your patient, applying to the wound you make the lightest and most comfortable aseptic screen. I repeat it, nothing is as good as cotton, in my judgment. Such is Listerism as I understand it to be in its relations to germs and germicides.

I append a table of germicides and antiseptics as given by Dr. Sternberg, who is perhaps the ablest and most conservative of all our observers in this line. At the Johns Hopkins University, where he now works, he has facilities at his command not surpassed in the world. He is perfectly skilled in the difficult, complex, costly and tedious technique of this line of observations, and he is, more than all and above all, perfectly candid and conscientious in stating his results.

(A) Germicides which destroy all known germs and spores:
(1) Moist heat at 280° F.
(2) Solution of corrosive sublimate, 1 to 1,000.
(3) Carbolic acid, 1 to 10.
(4) Mercuric iodide. (?)
(5) Liquor sodæ chlorinatæ, 1 to 10.

Acids { Sulphuric, 8 per cent.
Nitric, 8 " "
Muriatic, 15 " "

(B) Germicides which destroy micrococci and bacili, but not spores:
(1) Moist heat (fluid), at 212° F.
(2) Solution of corrosive sublimate, 1 to 1,000.
(3) Sulphuric acid, 1 to 100.
(4) Sulphur dioxide, 1 to 100.
(5) Carbolic acid, 1 to 50.
(6) Various commercial disinfectants from 10 per cent. to zero.

(C) Antiseptics which are not germicides:
(1) Alcohol, 95 per cent.
(2) Cupric sulphate failed in 15 per cent. solution.
(3) Ferric sulphate " " saturated solution.
(4) Sodium sulphate " " " "
(5) Zinc sulphate " " " "
(6) Bisulphate of lime " " 50 per cent. solution.

If we reflect on such facts as the foregoing table presents, we shall come to the conclusion that erroneous views on the subject of germicides, antiseptics and disinfectants have become widely prevalent among even the better informed of the medical profession. We ought, furthermore, to come to the conclusion that it is high time to expect that every competent medical man shall possess a definite knowledge of the bottom facts on which Listerism is grounded, and shall reform his practice accordingly.

ART. III.—**Pruritus Ani—Eczema Ani. Itching Piles.** By ARCHER ATKINSON, M. D., Baltimore, Md.

This is a harassing disease, causing much worry, rather than absolute pain. It occurs in and around the anus as an intense itching, chiefly during sleep. When awake, the patient feels less annoyance from the itching than from the dry sensation, like parchment about the orifice, just as if the perineum had been thinly painted over with collodion. Sleep occasions the itching only because of the increased warmth of the body in bed. The disposition is to rub or scratch the parts during sleep, and even in company the sufferer often feels, if he could step aside and rub for a moment, it would be an Elysium.

This condition resembles the itching of the tender gums in teething infants, and is akin to the sensation due to the presence of seat-worms; yet the remedies for these parasites fail in most cases to afford relief. The disease differs from true piles in that there is no hæmorrhoidal tumor, nor pain, nor flow of blood, as in internal piles, unless from immoderate scratching, which excoriates the parts and produces blood; but it now and then *does* resemble an inflamed external pile, from the inflammation present and from the occasional feeling of the elevated rim, which in old cases becomes more or less indurated. It is not uncommon, however, to find persons complain of some itching about the parts, who are subject to internal piles which do not bleed much, but which yield moisture.

Itching piles is a misnomer, as there is no real hæmorrhoid; but the term is so expressive of the feeling that it is in general use. It is much like the itching observed in some pregnant women, keeping up incessant worry and nervousness, and yet searching fails to discover the apthous condition of the rectal mucous membrane which is found in pruritus vulvæ. Fortunately the same remedies often answer in both these conditions.

Constipation, as well as profuse diarrhœa, favor the development of this condition—the former by pressure on the veins of the rectum, and the latter by keeping the parts

moist with the acrid bowel discharges. Scratching keeps up the moisture, which is alkaline, having much the smell of brine, and this bringing oozing, first moistens the adjacent parts and, then drying up, leaves them in the crispy state before mentioned. This fluid seems identical with that which weeps from old eczematous and erysipelatous surfaces.

Feather beds are favorable to the production of this condition of pruritus, and of other parts of the body besides the anus—the heat and loss of sleep caused by their use in some persons rendering them nervous and irritable and even thin. You now and then see horses and dogs suffering from this disease, and they obtain relief by rubbing against trees and the sides of the stall.

When the patient is in bed on his back, heavily covered up, or is but half asleep, he begins to scratch, doing himself harm before he is aware of it, and the next morning he finds the perineum tender and moist. You may find more or less hypertrophy of the mucous membrane, and that the folds of half membrane and half skin form into tags or teats about the rim of the anal orifice. The disposition is to handle these tags whenever the patient goes to stool, and this grows into a habit, until the fingers find their way to the parts unconsciously. These same tags keeping up the irritation and moisture, it will be observed that now and then a slight fissure may form, or a slight abrasion result, on the surface near the margin or between the anal folds. A case has been met with where just within the rim of the bowel was discovered a growth resembling in shape the spear of a rooster, but it was soft like the follicles in the trachea of a large sea-turtle. I have known such a substance to be snipped off with the scissors without pain, and improvement to follow at once.

It is certain that ascarides *do* sometimes give rise to itching piles, beginning especially in children; and, in a few cases, where no worms could be found, the injection of salt and water, of the infusion of quassia, or a weak infusion of aloes injected into the rectum, has caused a cessation for a considerable time of all itching. This was shown in the case of a young lady, whose life had become a torment from the pruritus. As no examination was made, except by a lady

friend, I could not positively say there were no ascarides present, though she had never observed any on her linen.

Anything which rubs the part, or creates heat about the anus, tends to the production of itching piles. Tobacco is a poison to such as suffer in this way. Whatever acts on the nervous centres as an excitant will serve to increase the itching. Alcohol in any form is injurious, and coffee and tea seem to accumulate in the system as nervous excitants. I recall one gentleman in whom all kinds of liquors start the disease; sweets, such as candies, sauces and molasses, give rise to it in some; puddings and pies in others. Indeed any agent, tending to cause dyspeptic symptoms, produce it in those persons who are predisposed to it.

When the individual wakes up with the propensity to scratch, he will do well to get out of bed and cool the surface by exposure to the air, or by sitting in a basin of cold water or on a cold surface, taking care to pat the part dry without forcibly wiping it. Constipation nearly always brings on an attack of pruritus by keeping the hæmorrhoidal veins congested—the hardened fæces in the lower bowel preventing the proper return from the surface to the large vessels, and as soon as the patient gets well warmed up in bed, or has had sleep enough, he awakes to find he has been tearing his flesh. In this way sound sleep greatly lessens the likelihood of itching, and so impressed was Mr. Allingham, of London, of the efficacy of this sweet restorer that he urges on his patients to walk briskly from five to ten miles a day, so as to induce sound sleep from bodily fatigue.

Smoking before retiring, hot suppers, and the free use of coffee at supper, will be sure to bring on a seizure or to aggravate an existing attack; and where a person is subject to this trouble he soon learns to live on plain food and to abstain from excesses of tobacco, wine, and spiced articles. He learns, also, that too frequent washing the parts beyond the mere effect of cleanliness, is apt to keep up the irritation, just as we see in some cases of true eczema. Indeed, every time he touches the parts with water, or with the towel, the inclination to scratch becomes irresistible, and this is even the case from contact of the drawers in bed.

Protrusion or eversion of the mucous membrane in old standing cases is apt to occur from hypertrophy of this tissue, because of the relaxed state of the membrane, and from the straining at stool, so apt to be indulged in by those who have itching piles. This membrane is apt, too, to be rubbed by the drawers in the day-time, giving a slimy albuminous discharge, which sticks to the linen and thus increases the itching, with the chance of forming slight ulcers or abraded patches on the erected mucous membrane, which prove annoying and hard to heal.

A gentleman informed me that attacks of this pruritus have, in several instances, left one or more abscesses about the verge of the anus, commencing as a small, rounded, hard prominence, and rapidly going on to the formation of an abscess—generally small, but in a few attacks as large as a walnut. These abscesses, in his case, all go on to maturity, and when freely opened give him immunity for about three months. Tincture of benzoated oxide of zinc relieves the itching until he gets to sleep.

One party, a great smoker, had his perineum and scrotum broken out with a constant eczematous oozing. He never passed a night free from irritating the parts, and his sleep was always disturbed. He was induced to stop smoking and soon improved, but he kept up the use of mercurial ointment, which he had found effectual, using one-fourth part blue ointment, rubbed up with cosmoline.

Another patient, weighing over 200 pounds, could not sleep from itching of the anus and lower extremities. He smoked excessively, 100 strong cigars lasting him but three days. For fifteen years he had suffered with eczema of the buttocks and thighs, and nothing gave him such relief as smearing mercurial ointment over the whole surface until he was slate-colored. He was never salivated, though he had thus freely used the ointment. He agreed to slacken up on his cigars, taking but six a day, and for six months he lived pretty much on tea and crackers, taking each day a dose of Rochelle salts mixed with cream of tartar. He lost considerable of his adipose tissue, and the annoyance of the eruption greatly abated. He was in this city a few weeks ago, and had not regained his flesh, nor did he suffer so much from the eruption.

As a rule, salves do little good in old cases of itching piles. The great point is to avoid scratching and rubbing while in

the half-sleepy state, and to use nothing in the way of food or drink calculated to excite the nervous system or to produce constipation. Whatever prevents sleep will be likely to bring on an attack. A good plan is to sit up until the system really needs sleep, and do all the walking possible, so as to induce fatigue. Those who work hard in the open air rarely suffer from it. Liquors, tobacco, spices, candies, pastries, and ice-creams are to be avoided. Ripe fruit and stewed prunes should be freely partaken of to render the bowels soluble. An occasional dose of Ward's paste, or of the compound liquorice powder, is useful, taken every second day or oftener. The Congress waters are all useful, especially the Geyser, of which two to four glasses may be drunk a day. The sulphuretted waters all do good by keeping the bowels soft, care being taken to avoid *too* free purgation at first. The same may be said of limestone waters in those not accustomed to their use. Of the foreign waters, the Hunyadi, the Frederickshall bitterwasser, and the Offner Recoskzy are all useful, and it is said that the external use of the water of the St. Clement's Well, in Michigan, as well as its daily internal administration in very small doses, will even cure a cold. I can say nothing of its efficacy. These saline waters act on the intestinal follicles chiefly from the Epsom and Glauber salts in them, and by exciting also a happy influence on the portal circulation and breaking up the congested condition of the hæmorrhoidal vessels. The Greenbrier White Sulphur water is especially useful in this way. Sulphur and cream of tartar form a favorite aperient in these cases. Cascara cordial and the buckthorn cordial act well simply by unloading the bowels, and in many instances breaking up the costive habit. Such articles as act forcibly on the rectum, as aloes, should be avoided. Injections of tepid water are useful by softening and washing out the fæcal balls which irritate the parts, but their too frequent use destroys the tone of the rectum.

When the patient *must be* medicated per orem, you will find Chapman's or the Lady Webster dinner-pill harmless. As in true piles, it is a good plan for the patient to accustom himself to go to stool just before retiring. Keeping open the

portal circulation is important, and to this end we may now and then resort to small doses of calomel or blue mass, with a few grains of sodii bicarbonatis, with some vegetable extract if preferred. An occasional dose of solution of citrate of magnesia or an improved Seidlitz powder will do good. Podophyllin adds to the trouble by its drastic property. The bromide of potassium is of use if given at late bed-time and in full dose as forty to sixty grains, helping in some to favor sleep. I would say the same for chloral but for fear of establishing the habit.

Suppositories, to do good, should be of anodyne properties—not morphia, but of from one to one and a half grains of extract of belladonna, or of two to four grains of aqueous extract of opium. They benumb the nerves of the rectum. I know a lady who had the characteristic nausea and formication of the skin from morphia suppositories—one grain—each night for twelve nights. Caustic applications are apt to disappoint you, and are painful, though one patient claims to have derived relief from a sixty-grain solution of nitrate of silver, and Mr. Allingham has seen good from strong carbolic wash, ʒj to ℥j. He also suggests a wash of oxide of zinc, glycerine and sulphur.

As chloral injections do such good in cases of irritable uterus and in threatened miscarriage, it was applied to the itching piles, rubbed up with vaseline (ʒj to ℥j); but I found it caused too much smarting on the tender parts, and a less quantity of chloral, I thought, would do no good. A strong solution of Wyeth's powdered boric acid is always useful to allay the itching. I applied it in one case—all that warm water would dissolve—and directed it to be applied when cold. The effect was wonderful in this case, and that, too, after other agents had failed, the patient acknowledging its full efficacy. A medical gentleman of this city finds much relief in his own person from the common yellow wash; and the mercurial salves, such as the ammoniated mercury and the blue ointment, softened down with vaseline [or cosmoline], often succeed when nothing else will. All ointments must be very gently applied, and *not* rubbed in, lest the friction start the itching, and for this reason, probably, they do not realize our expectations.

We now and then find abundant secretions of moisture accompanying syphilitic growths of the anus, but I have never known patients to complain of much itching in these cases; at any rate relief can be readily afforded by destroying the chondylomatous growths; indeed, a powder of calomel and bismuth or iodoform will dry them up. I have known comfort to follow the use of an ointment, as ordered by Professor N. R. Smith, which consisted of mercurial ointment and gallic acid, with pulverized opium. I can not give the exact formula. Tar ointments are objectionable because of their filthiness, though very useful where the patient can stand this objection. Iodoform ought to answer, and I shall try its efficacy when occasion offers. It might be mixed with the tar ointment with advantage.

In conclusion, I would add that more good comes from impressing upon the patient the fact that so long as he continues to keep the parts irritated by scratching or by rubbing, either with the hands or the clothing, he will have to suffer from his rashness; that the true advice to give him is "*Don't.*" Let him see that he abstains from such articles of food or drink as he finds tend to bring on the attack, and that he promote sleep by free out-of-door exercise and hard work, and that he avoid the use of feather beds and hot worsted cushions, as well as sleeping in close and warm chambers. This particularly applies to riding on covered saddles, and on cloth or velvet cushions in carriages and on railroads.

Should ascarides be present, get rid of them, and see that the tags be burnt, or, preferably, snipped off, and that hæmorrhoids be removed, if they give trouble by their size or irritation.

By far the better way to remove these teets is by the spring scissors, as less painful to the patient and quicker to the surgeon. Unless removed, these teets keep up the moisture, which seems to exasperate the itching. You would be surprised to find what a decided effect a drying-powder—such as the oxide of zinc, or even prepared chalk, or preferably calomel—has in reducing the size and sensitiveness of such growths. Calomel and bismuth sprinkled every day on ve-

nereal warts, and in smaller quantity on itching piles, will allay the itching much. The trouble in this class of cases is that these powders do not remain as readily on such parts as on more horizontal surfaces.

You will find the same good in soft corns, which are nearly always moist. They will often dry up and disappear with sprinkling of dry bismuth, magnesia or chalk.

Dr. Johnson, of Washington, recommends the following wash, after careful washing and drying the itching parts:

℞ Sodii hyposulphit..... ℥j.
Acidi carbolic.....gr. x.
Glycerini.....℥j.
Aquæ distil. .....℥vij.

M. S.—An ounce lotion to be re-applied whenever the itching returns.

He recommends, also, the dusting-powder, consisting of ℥j. of iodoform and ten grains of tannic acid, to be used twice or three times daily. If ascarides are present, he has found an injection of two ounces of the infusion of aloes (℥j to the pint), twice a day, will destroy the worms. An injection of infusion of quassia and table salt does much towards the destruction and washing away of the worms, the quassia acting through its bitterness just as does the infusion of aloes; alum, too, in the injection, or muriated tincture of iron, will both act in the same way by coagulating the albuminous worms.

ART. IV.—**Dry Iodoform Dressings for Wounds.** By J. W. BRYANT, M. D., Petersburg, Va.

Since Mr. Lister commenced "the antiseptic method" of treating wounds in 1865, various modifications of his method have been devised and practised to prevent fermentation and for the exclusion of micro-organisms. So well established is the Listerian law, that a surgeon who performs an operation without observing some of the various antiseptic precautions lays himself liable to severe criticism should any untoward symptom arise; and it has even been suggested that he

might be held legally responsible should a case terminate fatally in which the cause of death would be proved to have been septic poison.

Exactly how far these precautions, as they are laid down in the text-books of surgery, should be observed, it is difficult to determine. In nine out of ten cases in private practice it would be impossible to apply a dressing with strict aseptic precautions, as the books teach us to do; and still we can not avoid the responsibility which rests with us of protecting our patients—a responsibility which is not lessened by the fact that we have of necessity to content ourselves with much simpler dressings. The question, therefore, of surgical dressings is one which presents itself to every operator—in fact to every practitioner who treats any wound, however trivial it may be; and any cases which go to prove the efficiency of a dressing that, while it very much simplifies the treatment, will give equally as good results as the more elegant applications of the text-books, cannot fail to be of interest to the busy practitioner.

Whether that condition of the system which sometimes follows an injury, and has been variously termed pyæmia, septicæmia, ichorrhæmia, surgical fever, traumatic fever, etc., is due to the absorption of pus, a chemical ferment, or to the fact that micrococci or bacteria are introduced into the wound, and, finding their way into the blood and tissues, there multiply, is still an unsettled point, and one which it is not necessary for me to discuss in this paper.

The medical mind has seized with avidity the recent disclosures of the microscope, and we hear on all hands of a separate and distinct microbe for every disease—almost for every case. If, as is claimed by the supporters of that theory, these animalculæ only fructify in degenerating tissue, and we can prevent the disorganization of tissue after an operation, those precautions which are taken during an operation are entirely useless. We have only to cleanse the wound thoroughly, and apply some agent which will prevent putrefaction, and by protecting the parts from further contamination allow nature to repair the damage.

In several instances in my practice I believe that I have retarded rather than hastened recovery by meddlesome surgery, by removing the dressing in cases in which I have been governed by what I thought was the *right time to do so*, and not by the *symptoms present*. For some time I have been using dry iodoform dressings exclusively, and after properly applying it I have made it a rule never to remove a dressing unless there was some special indication for doing so, let the time be one hour or twenty days.

My object, therefore, for reporting at some length the following cases is to show that I have had as good results from iodoform and cotton as is obtained in the best-regulated hospitals, where the most elaborate measures are resorted to to render the cases aseptic:

CASE I—*Compression of Brain.*

W. H., aged 16, on June 10th was hit by a cane on the left temple, which knocked him down and produced complete insensibility for some time. When he recovered he walked without assistance to his home, a distance of half a mile. No immediate brain symptoms followed, and he slept quietly that night. The next day (June 11th) he was out, and felt no inconvenience except an occasional pain in the head, which lasted only a few moments at a time. On the third day (June 13th) he complained of dizziness when he stood up, and spent most of the day in bed. I saw him for the first time that day. His appearance was normal in every respect. There was no scalp-wound and very little swelling. He replied promptly to all questions, complained of no pain except slight darting pain in the head when he moved, had good appetite, slept quietly; pulse 80, soft and regular; temperature normal, and pupils responding promptly. He kept very quiet unless spoken to. Chloral and bromide of potassium were given at night.

June 14th.—Condition about same. Would become very pale upon raising up in bed. Continued without marked change until 11 o'clock, *June 15th*, when he had a slight convulsion. He had recovered from the convulsion when I saw him, and was sitting up in bed. Complained of no pain. Pulse 75, soft and regular; pupils responding promptly. He was very deaf, and at times could not be made to hear; would tell me he could not hear what I said to him. Unless he was spoken to he would sit perfectly still for half an hour at a

time, not so much as winking his eyes, and breathing so softly that the respiratory movements could scarcely be seen. There was no paralysis.

June 16.—He had another slight convulsion early in the day, and a very severe one about 11 o'clock, which was followed by complete unconsciousness, stertorous respiration, irresponsive and dilated pupils; pulse 60, full and labored, and paralysis of right side. I determined at once to operate. Assisted by Drs. Rudd, Hinton, Leigh and Stockdell, the patient was etherized. I then made a crucial incision at the point of injury, and dissecting up the flaps, found a slight oblique fissure in the skull, about two inches long and immediately over the middle meningeal artery. With the large conical trephine I opened the skull and found, directly under the fissure, and between the dura mater and skull, a large, firm blood-clot, about two inches in its transverse diameter and half an inch thick. This was easily turned out, as it was firmly coagulated, the hæmorrhage evidently not being of recent date. There was very little hæmorrhage during the operation; the wound was *wiped perfectly dry;* the edges of the incisions were brought together with adhesive straps, and the opening in the skull and entire wound filled and covered with iodoform. A thick pad of dry absorbent cotton was placed over it and secured by a bandage. Entire relief of all symptoms of compression followed the operation. Consciousness returned upon recovery from the anæsthetic; hearing was entirely restored on the second day; no evidence of paralysis existed after the first day, and no bad symptoms whatever interrupted a complete recovery.

The first dressing was not changed for twelve days, when the wound was found to be rapidly filling with healthy granulations. There was *no discharge*, the cotton being simply discolored immediately over the wound. The second dressing was removed on the twentieth day, when the wound was found to be entirely healed, and the patient was discharged.

CASE II—*Amputation of the Scrotum.*

J. R., aged 24, had varicocele since puberty; of late, was so much troubled that he could not attend to business or walk but a short distance without intense pain. He had used various suspensory bags with no relief. Upon examination I found the left spermatic vein very much distended, and the scrotum so very pendant and redundant that it was impossible to give permanent relief without curtailing the amount of tissue. I advised amputation, to which he readily consented. I improvised a clamp of two pieces of maple,

smoothly polished, and curved so as to give the desired shape to the stump, and which could be tightened by a thumbscrew at each end. The patient was etherized; and, assisted by Drs. Budd, Stockdell, Schank and Steel, I passed as much of the bag as was desired to amputate through the clamp, taking care to avoid the spermatic veins and cords, and tightened the screws sufficiently to control hæmorrhage. I then passed entirely through the scrotum, outside of the clamp, five long silver-wire sutures, which were to be used to hold the lips of the wound together, and prevent the escape of the testes when the clamp was removed. I then amputated the superfluous tissue with a sharp knife. The clamp was then removed and the parts held together by the wire sutures. The wound was wiped dry and closed with a continuous silk suture. Iodoform and cotton dressing was applied, as in Case I, and secured by napkin bandages.

The dressing was removed on the sixth day to remove the sutures, and the wound was found to be united with the exception of about an inch at the most pendent part. This was due to the fact that I did not adjust the lips of the wound at this point as well as I ought to have done, and also to the fact that I did not trim the hair from the scrotum as carefully as I should have done, for I found several hairs between the lips of the wound, which, of themselves, would have prevented union. There was a slight discharge from the ununited part of the wound, and the dressing was changed, in all, four times. The patient was discharged on the seventeenth day with directions to wear an elastic suspensory bag for some time.

The varicocele is entirely cured—the man being able to attend to his work without using any support except what is given by the contracted scrotum. Very considerable nervous shocks followed immediately after the operation, due, I think, to exposure of the testicles. With this exception, no untoward symptom appeared.

Case III. *Gunshot Wound of the Shoulder.*

P. Thweat, colored, æt. 15, received on October 11th a severe wound in the right shoulder from a gun loaded with No. 4 shot. He was about six feet from the muzzle of the gun, and the load passed clear through, shattering the acromion extremity of the clavicle and the corocoid process and spine of the scapula—lacerating the soft parts to a frightful extent. The boy was some distance from town, and it was several hours before Dr. Rowlan, of Prince George county, who was sent for, could see him. He applied a cold compress to con-

trol the hæmorrhage, which had been very profuse. I saw him the next morning and found it would be necessary to remove the clavicle as far back as the attachment of the pectoralis major, and all of the scapula above the lower border of the spine, including both processes—fortunately being able to leave the neck of the bone entire, and I was fortunate enough, too, by careful dissection, not to open the glenoid cavity. The boy was chloroformed, and being assisted by Dr. Schank and Dr. Rowlan, the operation was performed as above described. The transversalis colli and supra-scapular arteries had been severed, and the profuse hæmorrhage which followed the injury was from these branches. There was very little hæmorrhage, however, during the operation—no ligatures being required. The edges of the lacerated tissues were trimmed with scissors and brought as nearly together as possible with rubber adhesive straps; the entire wound was covered with iodoform, and a cotton compress and a firm bandage were applied.

There was more discharge in this case than any in which I have applied the dry iodoform dressing, owing to the laceration of the tissues, but nothing like what I have seen in such cases with water dressings. It was necessary to change the dressing on the third day, and on every second day afterwards for one week, when they were renewed every fourth and then every sixth day—in all, nine dressings. The patient was discharged on the twenty-eighth day after the operation—not having had a bad symptom from the day he came under my care. The shoulder droops considerably, and of course the motions are very much restricted—the attachments of the deltoid being so much injured. He has, however, very good use of the forearm.

Case IV. *Incised Wound of the Knee.*

W. S., aged 31, while coon-hunting, fell on the edge of an axe, and received a bad cut in the knee. He was some distance from town, and as he could get no conveyance at that time of night, was obliged to walk. He suffered great pain in the knee and lost a quantity of blood. When I saw him the next morning, I found a large, gaping wound about three inches long, extending into the joint between the internal condyles and partially severing the accessory band of the vastus internus and capsular ligament, and opening the joint to such an extent that I could put my finger between the condyles and remove some clots collected there. It was very painful, especially in the popliteal space. After cleansing the parts, I brought the lips of the wound together with

adhesive straps and applied the iodoform and cotton dressing, with Ahl's posterior felt splint to support the limb, and gave an injection of morphine hypodermically. In four hours, I was called to see him and found the wound bleeding profusely. He had had a slight rigor about an hour before, and was suffering acute pain in the joint. His temperature was 101°. I removed the dressing and found that the straps had slipped and the wound had filled with clots. Thinking that the pain was due to hæmorrhage into the joint, I flexed the leg and pressed the condyles firmly together, and making firm pressure in the popliteal space with my fingers, by a quick movement I straightened the limb and succeeded in removing several clots and a quantity of bloody serum and senovia. The hæmorrhage was from the circumflex artery and was controlled by torsion. I then dried the wound with absorbent cotton and closed it with long adhesive straps. The dressing was then re applied, and morphia was repeated. All the acute symptoms passed off in a few hours and the man made a rapid recovery.

On the fourteenth day, while walking across the room, contrary to my directions, he tripped and fell, striking the knee a severe blow and tearing apart the freshly-united tissues to some extent, but not opening the joint. This accident protracted the case some, but he has made a good recovery, with perfect motion of the joint. Only five dressings were applied after the first one, and there was not over half an ounce of discharge during the entire treatment.

Case V. *Compound Comminuted Fracture of the Fibia and Fibula.*

W. R., colored, aged 23, in uncoupling an engine from a train in rapid motion, fell, and was struck by the guard of the engine, throwing him clear of the rails. He received a compound comminuted fracture of both bones of left leg just above the ankle. The tibia was shattered for at least four inches, one of the fragments making an ugly wound on anterior of limb. The fibula was broken in three pieces—the upper fragment making a small punctured wound. Two small pieces of bone were removed with forceps. There was not much hæmorrhage. The limb was adjusted and put in an ordinary fracture-box, a dressing of iodoform and cotton applied to the flesh-wounds, and an anodyne was administered. I anticipated much trouble in this case, as the bones were so badly broken and the soft parts so much bruised. To my surprise, there were no inflammatory symptoms; swelling subsided, and the case progressed favorably to the

end. The dressing was changed on the sixth day, and again on the fourteenth day, when the limb was put in Amesbury's splint and gradual extension made. He made an excellent recovery, with about half an inch shortening.

CASE VI. *Strangulated Inguinal Hernia.*

At Dr. Stockdell's request I operated upon a case of hernia which occurred in his practice. The hernia had frequently been down, but had always been easily reduced until now. The strangulation was due to the remains of an old syphilitic bubo. In fact, the man had a general syphilitic eruption over his face and extremities, and mucous patches in his mouth. It proved to be an omental hernia, and was very darkly congested, and there was a quantity of dark-colored lymph around the hernia and filling the sack. This was broken up and removed with the finger, and the protruding omentum cleansed as well as could be done under the circumstances and returned to the abdomen. The wound was closed with wire sutures and adhesive straps, and the iodoform and cotton dressing was applied. The sutures were removed on the sixth day, when the wound was found to be united its entire length. The only discharge seen was about a drop at each stitch—a simple line of discoloration marking the cotton immediately over the incision. I did not see the patient again, but Dr. Stockdell tells me he made a good recovery.

CASE VII. *Compound Comminuted Fracture of Femur.*

I have to report a case in which I failed to get any benefit from the use of iodoform. This was the case of a boy, aged 12, who received a compound comminuted fracture of the femur by being run over by a street car. The bone was crushed and the soft parts very badly contused. There was a cut about an inch long on the inner aspect of the thigh, and the tissues immediately over the fracture were mashed apart. Dr. P. S. Schank attended the case with me. We put on the counter-extension splint, and applied iodoform and cotton dressing. A few hours after the application of iodoform the patient had symptoms of acute congestion of the kidneys, high fever, pain in the back, hæmaturia and violent strangury. We were at a loss to account for these symptoms, and as an experiment removed the dressing and washed off the iodoform; in twelve hours the symptoms had all subsided. As there was free discharge from the wound, we re-applied the iodoform, and there was a recurrence of all the bad symptoms, and again they were relieved by discontinuing it. We then abandoned the use of iodoform entirely.

I will state, however, that in consequence of not being able to use the iodoform a large abscess formed in the cellular tissue along the tract of the sartorious muscle, requiring a counter-opening at the crest of the ilium, and which discharged a large amount of pus, greatly weakening the patient and prolonging the case into many weeks. The boy made a most excellent recovery, notwithstanding this complication. I have examined him carefully since he has been out, and really there is no shortening of the limb at all. This is the only instance in which I have seen any bad effect occur from iodoform, and here it must have been due to some idiosyncrasy on the part of the patient.

These are the cases which I think deserve special notice. I could add various cases of amputations, excisions and flesh-wounds, in all of which the results were equally as good.

It will be seen that in all these cases I have depended entirely upon the antiseptic properties of the iodoform and cotton to prevent suppuration and protect the wound. In not a single instance except the one given (Case VII), has there been surgical fever or any other complication to retard recovery. These cases occurred in private practice, and in not one of them would it have been possible to apply an antiseptic dressing, as we are told to do in most text-books.

The only points which I think it necessary to observe to get perfect results, are, that the wound should be *wiped* perfectly dry with absorbent cotton before the dressing is applied. Every particle of the fresh surface should then be covered with iodoform, and a thick pad of absorbent cotton should be placed over it. The dressing should then remain untouched until some special indication necessitates its removal or the case is cured.

In changing a dressing, the granulating surface should never, under any circumstances, be washed; but any discharge which may be found should be wiped off with dry absorbent cotton.

Of course, in any case, it will be necessary to watch the patient closely, and see to it that any such constitutional symptoms as would inevitably follow an accumulation of pus, or any unhealthy action about a wound, be attended to at once.

ART. V.—**Pepsin and its Preparations.** By JOHN J. CALDWELL, M. D., Baltimore, Md.

The study of special stomach and bowel diseases makes it desirable to look for preventive as well as curative agents, as an ounce of the former is better than sixteen times the latter. My purpose in this paper is, in a short space, to call attention to such articles as experiments have proven will prevent or cure diseases of the digestive organs in very many cases. The inroads of irritation by simple catarrh of the mucous membrane of the stomach, and of irritation of the mucous membrane by sour milk, gravies, and starch compounds in young children, may in very many instances be prevented, and often life saved, by a close attention to diet.

Pepsin, the most powerful adjunct in digestion, and of which so much benefit is gained as a preventive medicine, is manufactured by very many pharmacists, each claiming a superiority over their cotemporaries in some special degree. I can only refer to such as have manifested their merits in my practice.

Messrs. Schieffelin & Co., of New York, have a formula for pepsin with bismuth and strychnine, in soluble gelatine pills, which I have found of great value in gastric troubles. It fulfils more relations in stomachic disorders than any other with which I am acquainted. This firm also prepares a very worthy saccharated pepsin, which dissolves readily fifty times its own weight of freshly coagulated (egg) albumen, as also a convenient and efficient solution of liquid pepsin, one-half ounce of which dissolves one hundred grains of coagulated albumen. These chemists also have their pure pepsin, one grain of which dissolves three hundred grains of egg albumen.

Messrs. Fairchild Bros. & Foster, of New York, manufacture an article known as "Peptogenic Milk Powder," which is designed to supply the daily food of a nursing infant, as a physiological substitute for mother's milk. This preparation is free from any starch, malt, sugar or cane sugar. In this

preparation, the digestive ferment, trypsin, is the agent utilized to effect a much desired change in the caseine by which it becomes similar in constitution to the albuminoids in woman's milk. It also supplies essential components necessary to adjust the prepared milk to the quantitative composition of human milk. This humanized milk gives in the stomach, or with acids, the minute, soft flocculi characteristic of human milk, and in striking contrast to the large masses of curd formed by cow's milk.

Professor Albert R. Leeds, a recognized authority on the subject of infants' foods and analyses of human milk, states that the "peptogenic milk powder" has "been found to yield a humanized milk which in taste, physical character and chemical constitution approaches very closely to woman's milk."

We have the analysis given by Professor Leeds of 80 samples of woman's milk and humanized milk as yielded by the peptogenic powder, viz:

Water—minim.,	83.21.	Maxim.,	89.08.	Av'ge,	86.73.	Humanized milk,		86.02.
Fat,	" 2.11.	"	6.89.	"	4.13.	"	"	4.50.
Milk sugar,	" 5.40.	"	7.92.	"	6.94.	"	"	7.00.
Albuminoids,	" .85.	"	4.86.	"	2.00.	"	"	2.00.
Ash (salts),	" .13.	"	.37.	"	.20.	"	"	9.30.

Directions: Put an even full measure (each can of Peptogenic Milk Powder contains a measure) of the Powder in a tin cup, and mix with four tablespoonfuls of water and four tablespoonfuls of fresh milk and one tablespoonful of cream. Heat over brisk flame for six minutes, stirring constantly with a spoon, and tasting often, so that it shall not get too hot to be sipped. Now put into the nursing-bottle, and it is ready for feeding.

If cream is not convenient, add one tablespoonful more of milk. Never allow the milk to become warmer than can be borne by the mouth. If it becomes too warm, the vitality of the digestive principle of the Peptogenic Milk Powder is destroyed. The Powder should be kept tightly covered, in a dry place.

There is another preparation manufactured by this firm—"Pepsin in Scales"—thin, flat, of yellowish color, and en-

tirely free from starch or sugar of milk, as well as from other impurities. A single grain of this preparation, dissolved in a half pint (8 oz.) of water, to which forty drops of hydrochloric acid are added, has been found capable to dissolve one thousand grains of coagulated albumen at 100° F. in the space of four hours. The firm has the pepsin in the form of powder and scales. It is good, in the digestive process, by admixture in such form in the stomach and bowels for digestion. In my experiments with the article, I boiled an egg about five minutes and rubbed it finely. Then, to one grain of the Pepsin Scales I added eight ounces of water and about forty drops of muriatic acid, which solution I found to dissolve about one thousand grains of the coagulated albumen in four hours at a temperature of 100° F.

In cases where I administered the above remedies, I have found them to come up fully to the requirements of the case in digestive troubles.

The artificial (humanized) milk I conscientiously believe is the best substitute yet offered for the natural supply, and, indeed, in many cases better than the mother's milk, especially where the question of health or taint is involved, and many times safer than to trust the babe to a professional nurse.

Messrs. Wm. R. Warner & Co.'s Concentrated Pepsin in Powder is a preparation much appreciated by all who have occasion to use pepsin in scales, and especially where a concentrated article is required. It forms a clear solution, retains a pulvurulent condition, and mixes with other substances. The use of this preparation in cases of ulcers of various parts of the body—particularly those of the stomach—has given very satisfactory results, from its power of dissolving albuminous products. This pepsin has been found useful as an application to diphtheritic ulcers; also for indigestion of children, who take it without much trouble. Again, this preparation is found very useful in nervous vomiting and diarrhœa. I find this pepsin has many more times the power of digestion than the saccharated form. The advantages of Warner & Co.'s Pepsin—as indeed of all their preparations—are that it is uniform and reliable.

Proceedings of Societies, Boards, etc.

VIRGINIA STATE BOARD OF MEDICAL EXAMINERS.

Pursuant to adjournment of the meeting for organization of the Virginia State Board of Medical Examiners, held in the city of Richmond, December 15th, 1884, the Board met at 10 A. M., Wednesday, April 8th, 1885, in the Hall of the House of Delegates, in Richmond, Va.

MEMBERS PRESENT.

Of the thirty-two members composing the Board (two from the State at large and three from each of the ten Congressional Districts of Virginia), the following were present: Drs. Wm. C. Dabney, of Charlottesville, Albemarle Co., *President;* F. D. Cunningham, of Richmond, Henrico Co., *Vice-President;* Hugh T. Nelson, of Charlottesville, Albemarle Co., *Secretary*, and W. W. Douglas, of Warsaw, Richmond Co., *Treasurer*, besides the following other members: Drs. Harvey Black, of Blacksburg, Montgomery Co., C. C. Conway, of Rapidan, Culpeper Co., O. A. Crenshaw, of Richmond, Henrico Co., Chas. R. Cullen, of Henrico Co. (P. O., Richmond, Va.), S. W. Dickinson, of Marion, Smythe Co., O. B. Finney, of Onancock, Accomac Co., W. J. Harris, of Blacks and Whites, Nottoway Co., L. Lankford, of Bowers, Southampton Co., H. Grey Latham, of Lynchburg, Campbell Co., Richmond L. Lewis, of Richmond, Henrico Co., Rawley W. Martin, of Chatham, Pittsylvania Co., Wm. P. McGuire, of Winchester, Frederick Co., Henry M. Pattison, Staunton, Augusta Co., Jesse H. Peek, of Hampton, Elizabeth City Co., Robert J. Preston, of Abingdon, Washington Co., W. L. Robinson, of Danville, Pittsylvania Co , Hugh Stockdell, of Petersburg, Dinwiddie Co., Z. G. Walker, of Brownsburg, Rockbridge Co., and Oscar Wiley, of Abingdon, Washington Co.—23.

The minutes of the preceding meeting of the Board (December 15th, 1884), were read and approved.

Dr. Dabney, chairman of the Committee to formulate the proceedings of the Board, reported progress, and requested to be continued. Granted.

On motion by Dr. Cunningham, the Committees to Examine on the Different Branches of the Medical Sciences were named, and the examinations were begun, after announcing to those to be examined the following brief of the

PLAN OF EXAMINATIONS:

1. Examination questions and answers are to be in writing or printing.

2. The applicant is required to answer at least three-fourths of the questions satisfactorily, and show a fair, general knowledge of all the branches upon which he is examined.

3. Applicants can neither give nor receive information relating to the subjects under consideration during the examination.

4. No examiner is permitted to tell the applicant the result of his examination until after the examinations are over and have been passed upon by the Board.

EXAMINERS IN SECTIONS,* AND THEIR QUESTIONS.

Committee on Chemistry:—Drs. R. L. Lewis, Hugh T. Nelson, Jesse H. Peek and S. W. Dickinson.

Ques. 1. Give the process for the reduction of aluminium; its specific gravity; its point of fusion; its solvents; its physical properties. Name its medicinal salts and their therapeutic uses.

Ques. 2. Give the process for the manufacture of sulphuric acid from the bisulphate of iron. Give the symbols. Give the symbols for Nordhausen and for anhydrous sulphuric acid.

Ques. 3. Give the process for the reduction of iron; the difference between cast-iron, wrought-iron and steel, and the two most delicate tests for the salts of iron.

Ques. 4. Take the stomach of a man supposed to have been poisoned with strychnia, carbolic acid, oxalic acid, or zinc, and give the whole process for testing for each of these substances.

Ques. 5. Test some well water for the albuminoids, chlorides, sulphates; for iron, lime, soda, potash and lead. What would a large quantity of chlorine probably indicate?

Ques. 6. Give the antidotes for the salts of arsenic, lead, copper, zinc, antimony, and the modes of preparing each of these antidotes.

Committee on Anatomy:—Drs. F. D. Cunningham, Wm. P. McGuire, L. Lankford and R. D. Huffard.*

Ques. 1. General composition, structure and mode of nutrition of bone. Classification of bones and examples of each kind.

Ques. 2. Describe the hip, elbow and occipito-axoid joints.

Ques. 3. Anterior abdominal muscles, and the relations of the hernial rings.

*The star (*) after the names of Examiners indicates that the parties named were not in attendance upon this session. The vacancies were filled *pro tem*, as far as possible by the appointment of other members of the Board present.

Ques 4. Locate and describe the valves of the heart, and give outline of the portal circulation.

Ques. 5. Give sub-divisions and relations of the different parts of the alimentary canal.

Ques. 6 General and descriptive anatomy of the kidneys.

Ques. 7. Cranial nerves—their origin and modes of exit, and their functions.

Ques. 8. Membranes of the brain and [spinal] cord. Number and relations of the same.

Committee on Hygiene:—Drs. J. Herbert Claiborne,* Chas. R. Cullen, S. W. Carmichael* and Oscar Wiley.

Ques. 1. Name some of the diseases preventable by sanitary legislation, and of other diseases lessened in violence.

Ques. 2. Give the different modes of disinfecting bedding, buildings and cisterns, and name the best disinfectants in use.

Ques. 3. What are the effects of impure water and of impure meat taken into the stomach, and how manifested?

Ques. 4. What are the effects of alcohol at different ages of life, as a beverage, in health and disease.?

Committee on Physiology:—Drs. Harvey Black, W. L. Robinson, O. A. Crenshaw and Wm. C. Dabney.

Ques. 1. Describe the various secretions concerned in digestion; their source, and what elements of food each digests.

Ques. 2. What nerves are concerned in the contraction of the iris?

Ques. 3. Describe the nerves in their distribution to the recti and oblique muscles of the eye.

Ques. 4. State quantity of urea excreted in twenty-four hours, and sources from which it is derived.

Ques. 5. What are the functions of the red and white corpuscles of the blood? Also what length of time is required for the blood to make the entire circuit of the system?

Ques. 6. What are the physiological factors in production of heat in the human body, and from what points is it *mainly* eliminated?

Ques. 7. State the functions of the gray and white matter of the spinal cord; the course of the sensory and motor impressions, and name the centres in the spinal cord.

Ques. 8. What are the functions of the cerebellum?

Committee on Materia Medica and Therapeutics:—Drs. Robt. J. Preston, C. C. Conway, Hugh Stockdell, and John H. Neff.*

Ques. 1. Give origin, uses and different preparations of ipecac.

Ques. 2. Give origin, uses and antidotes of opium.

Ques. 3. Give antidotes for strychnia, arsenic and lead poisoning.

Ques. 4. What are counter-irritants, and their therapeutic uses?

Ques. 5. Give doses of the different tinctures of aconite, of tincture veratrum viride, with the common name and nativity of the last named drug.

Ques. 6. Describe the most important preparations of mercury, with the dose of each.

Ques. 7. What is the most important therapeutical application of mercury?

Ques. 8. What is massage? Give its therapeutics.

Ques. 9. Give dose of infusion digitalis, liquor potassæ arsenitis, dilute hydrocyanic acid, oleum tiglii.

Ques. 10. Give rate of dosage for children.

Ques. 11. Ergot, its preparations and their uses and doses.

Ques. 12. Origin and uses of atropia.

Ques. 13. Give origin and uses of salicin.

Ques. 14. Digitalis, its nativity, effects on system; dose of tincture.

Ques. 15. Give formal prescription for castor-oil emulsion.

Committee on Obstetrics:—Drs. Alex. Harris,* Z. G. Walker, W. W. Douglas, and O. B. Finney.

Ques. 1. What is the period of gestation, and how calculated?

Ques. 2. What is natural labor, its usual duration, and stages? and what the duty of the physician when called to a supposed case of labor?

Ques. 3. What is placenta prævia? How determined, and how treated?

Ques. 4. What is post-partum hæmorrhage—its causes and treatment?

Ques. 5. At what period of labor, and in what character of cases should ergot be administered?

Ques. 6. In threatened abortion, with hæmorrhage, what should be done?

Committee on Practice of Medicine:—Drs. R. W. Martin, Bedford Brown,* H. M. Pattison, and W. J. Harris.

Ques. 1. Causes of (1) cirrhosis of the liver? (2) of true croup? (3) of remittent fever? (4) of acute pericarditis?

Ques. 2. Pathology of (1) epilepsy? (2) of acute pneumonia? (3) of diphtheria? (4) of apoplexy of the brain?

Ques. 3. Symptoms of (1) epidemic cerebro-spinal men-

ingitis? (2) of acute dysentery? (3) of measles? (4) of acute rheumatism?

Ques. 4. Diagnosis of (1) true croup? (2) of scarlet fever? (3) of cholera infantum? (4) of typhoid fever?

Ques. 5. Treatment of (1) chorea? (2) of cholera morbus? (3) of diphtheria? (4) of pleuritis, acute?

Committee on Surgery:—Drs. H. Grey Latham, Thomas B. Ward,‡ T. B. Greer,* and W. D. Merriwether.*

Ques. 1. Causes of (1) septicæmia? (2) of erysipelas? (3) of hæmorrhoids? (4) of hip-joint disease?

Ques. 2. Pathology of (1) gonorrhœa? (2) of glaucoma? (3) of stricture of urethra? (4) of caries?

Ques. 3. Symptoms of (1) sub-coracoid dislocation? (2) of otitis media? (3) of Colles' fracture? (4) of aneurism?

Ques. 4. Diagnosis of (1) acute intestinal strangulation? (2) of dislocation of femur on dorsum ilii? (3) of hydrocele of testicle? (4) of direct inguinal hernia?

Ques. 5. Treatment of (1) fracture of the clavicle? (2) of Pirogoff's operation on foot? (3) of ligation of subclavian artery? (4) of penetrating wounds of chest?

The applicants got to work by 11 A. M., and adjourned about 5 or 6 o'clock in the evening, to return the next morning to finish questions not answered. Most of the applicants finished and handed in their papers about 6 or 7 P. M., of the second day.

An Executive Session of the Board

Was held in the Parlors of the Exchange Hotel (through the courtesy of the Proprietors, who did their part generously and well) at 8½ P. M., of April 8th, when the

Report of the President

Was presented by Dr. W. C. Dabney. Much of routine work was shown to have been performed by the Board and its officers so as to perfect the organization, and to meet the exact demands of the law. Among other things he had caused the following circular to be sent to each of the County Court Clerks, etc., in the Commonwealth of Virginia:—

"Charlottesville, Va, ———, 188–.

"The attention of County Clerks, Commissioners of the Revenue and County Treasurers is called to Chapter 65 of Acts of Virginia Legislature, 1883–84, and especially to Sections 6, 7, 8, 9 and 10 of said Chapter in reference to the

‡ Died April, 1885.

practice of Medicine and Surgery in Virginia; and the officials aforesaid are respectfully requested, so far as the province of each extends, to see that the provisions of said Act are strictly complied with. Respectfully,

"WM. C. DABNEY,
"*Pres't Med. Exam. Board of Va.*
"H. T. NELSON, M. D., *Sec'y.*"

The following are abbreviated copies of some

BLANK FORMS,

Which have been issued since the meeting in December, 1884:

"Form I" is for Application of party to appear before the Board in accordance with law—the spaces for name, age, Post-office, and when and where graduated in medicine, and by whom [two citizens endorsing the applicant], to be filled out by the applicant, which he is to forward to the Secretary of the Board, accompanied with the prescribed fee ($5) for each examination.

"Form II" authorizes the party who has complied with the requirements of Form I "to appear before the Board at the next meeting, or before any three (3) individual members of the Board as he may select under Section 4 of said Act." Each Examiner before whom the party appears endorses his name on the back of this form, and states the dates of examinations held. After due examinations, this form, properly filled, will be reported promptly to the President of the Board, who will give the proper information to the candidate.

"Form III" Furnishes blanks for the proper statement of questions to be used in examinations upon each of the several branches of Medicine.

As further explanatory of all the details of what it is important for the applicant to know, the following circular was lately issued:

"Any person desiring to obtain a license to practice Medicine in Virginia, should write to the Secretary of the Board, Dr. H. T. Nelson, Charlottesville, Va., for a blank form of application, which will explain itself.

"A candidate can apply for examination either to the Board in session or to any three (3) individual members thereof whom he may select. If he prefers the latter course, the law requires that he shall stand a *separate* and *distinct* examination before each of the three examiners. In other words, if he applies to the Board in session, he will have to

stand *one* examination only on Chemistry, Anatomy, Hygiene, Physiology, Materia Medica and Therapeutics, Obstetrics, Practice, and Surgery; while if he prefers to apply to three individual examiners, he will be required to stand *three* examinations on each of these branches.

"According to the plan adopted by the Board on November 15th, 1884, each applicant is required to answer six questions on Chemistry, eight on Physiology, fifteen on Materia Medica and Therapeutics, six on Obstetrics, twenty on Practice, and twenty on Surgery.

"The examination will be conducted in writing."

Two Examinations for Practice

Have been conducted during vacation by three individual members of the Board. One of the applicants was rejected on account of the absolute failure of "the papers" to come up to the required standard—three-fourths of the values of the whole number of questions answered. The other applicant for practice—Dr. K. H. Trimble, of Monterey, Highland county, Va.—passed an excellent examination, and received the Certificate of the Board to that effect.

Dr. Dabney, after detailing some records and comments which he had seen in the *Virginia Medical Monthly* of a recent date, suggested that steps be taken to decide whether or not the law under which the Board is acting applies to travelling quacks, etc. The members of the Board residing in Charlottesville had caused the arrest of such an one, and the law will be tested by this case.

On motion of Dr. Douglas, a Committee of three was appointed to carry out the suggestions contained in the President's Report—the said Committee to be composed of the President, Vice-President and Secretary.

The Death of Dr. Thos. B. Ward,

of Norfolk, Va.—a member of this Board—having been announced by the President, on motion, Drs. Latham, Cunningham and Preston were appointed to draft suitable resolutions.

A Permanent Executive Committee,

On motion by Dr. Preston, was ordered to be appointed—said Committee to act as a Board Advisory to the State Medical Examiners' Board. Drs. Black, Cunningham, Dabney, Martin, Nelson and Preston were elected to compose this Board.

The Treasurer's Report

Shows that to date about $140 have been collected, and that

for printing, stationery, postage, and other incidental expenses, about $90 had been expended.

At the meeting of the Board on the night of April 9th, to review the examination papers, etc., it was found that the following named gentlemen, arranged alphabetically, had

PASSED SATISFACTORY EXAMINATIONS, AND RECEIVED THE CERTIFICATES OF THE BOARD, DULY SIGNED AND SEALED:

DOCTORS.	POST-OFFICES.	COUNTIES
Robt. Randolph Ball	Casanova	Fauquier.
T. L. Booton	Luray	Page.
S. W. D. Brewer	Harrisonburg	Rockingham.
Frank Camm	Lynchburg	Campbell.
Geo. W. Cocke	Berger Station	Pittsylvania.
J. G. Davis	West Point	King William.
James G. Field, Jr	Gordonsville	Orange.
Andrew C. Fisher	Richmond	Henrico.
R. H. Garthwright	Elko	Henrico.
H. H. Irwin	Woodstock	Shenandoah.
W. J. Kendall	Paris	Fauquier.
J. W. Kite	Liberty Mills	Orange.
D. A. Kuyk	Atlee's	Hanover.
A. L. Leftwich	Richmond	Henrico.
W. A. McKinney	Lynchburg	Campbell.
F. M. Nichols	Snickersville	Loudoun.
Robt. G. O'Hara	Charlemont	Bedford.
W. A. Plecker	Staunton	Augusta.
E. A. Terrell	Beaver Dam	Hanover.
W. L. Williams	Marysville	Campbell.

Analyses, Selections, etc.

Iodine for Acute Diseases.

Dr. J. J. Berry, of South Norwalk, Conn., contributes a short paper on this subject to the February 15th, 1885, issue of the *New England Medical Monthly*. During the preceding year he had used iodine extensively—perhaps over a hundred times—in *acute* non-syphilitic diseases, with very satisfactory results. In *acute malarial diseases*, he has used iodine twenty-six times, and ranks it as only below the cinchona salts in efficacy. His best results were obtained with the compound tincture of iodine, in doses of from ten to twenty drops every

three or four hours. If given well diluted, and at the proper time, it seldom disturbs the stomach. In other respects it is more acceptable than quinine. In more *chronic malarial poisoning*, he uses larger doses, less frequently repeated, and, with it, arsenious acid in gradually increasing doses. These two drugs, used in conjunction with remedies which act specially upon the liver, seldom fail to cure. Donovan's solution is a valuable anti-malarial remedy.

In *gastric irritation*, one or two drops of the compound tincture of iodine, often repeated, is exceedingly valuable. In the vomiting of pregnancy and of chronic diseases, it is as efficacious as other remedies. Its antiseptic properties render it valuable in typhoid fever, diphtheria and like septic diseases. Observations show that typhoid fever patients who are treated with iodine have usually no high exacerbation of temperature and no symptoms of intestinal ulceration.

Schwartz, several years ago, claimed that given in the initial stages of pneumonia, it cut the disease short. Moderately large doses, frequently repeated, have given satisfactory results in acute bronchitis and intense pulmonary engorement. It is the most powerful anti-suppurative remedy which we possess. It is valuable in preventing the formation of pus in acute tonsillitis, and in controlling the congestion of these parts.

Paraldehyde for Delirium Tremens.

Dr. R B. Gilbert, of Louisville, Ky., relates his experience with this drug in the *Louisville Medical News*, December 20, 1884. In a case of delirium tremens he attended, after the failure of potassium bromide, valerian, hyoscyamus and morphine to produce sleep, paraldehyde was successful. It was a natural suggestion, since this agent "is a hypnotic, producing perfectly a natural sleep of from two to six hours duration, from which the patient awakens without any sense of distress, headache, dullness or nausea." The elixir is an elegant form in which to administer the drug. Flexner's elixir contains two drachms of paraldehyde to the fluid ounce. In fifteen minutes after giving a tablespoonful of the elixir, the patient subsided from violent delirium into a deep sleep which lasted three hours. When he awoke he was not as delirious as he was before. After being awake one hour, another tablespoonful of the elixir was given, and in ten minutes the patient again fell into a deep sleep which continued some six or eight hours. He awoke perfectly rational, without tremulousness or headache, and was able to eat a

hearty breakfast. In short, he was well. Such successes will make paraldehyde a substitute for opium or chloral as a hypnotic. It is a pure hypnotic.

Treatment of Epilepsy.

Dr. Charles K. Mills, of Philadelphia, Pa., read some "Notes" on this subject before the Philadelphia Neurological Society which are published in the *Therapeutic Gazette* of February 16th, 1885. In his private and hospital practice, he can recall only seven cases of apparent or real cure of genuine epilepsy. In all of these, there were no recurrent attacks for a period of more than from one to three years. Gowers mentions cases in which seizures had not recurred for as much as four, five, six or seven years. Several of these were children; three of Dr. Mills' seven cases were children. But all observations as to the cure of epilepsy are necessarily imperfect, since after a number of years, the attacks are apt to return.

The Doctor has used the following remedies, singly, usually three or four times a day, in varying doses in a series of cases during the past ten years: Potassium bromide, sodium bromide, ammonium bromide, camphor mono-bromide, hydrobromic acid, potassium iodide, sodium biborate, chloral-hydrate, zinc oxide, zinc valerianate, silver nitrate, tincture and extract of belladonna, extract of cannabis indica, tincture and fluid extract of cocculus indicus, and potassium nitrate. Other remedies which he has only used in combination with some of the above are: Conium juice or fluid extract, tincture of digitalis, sulphate of strychnia, Fowler's solution of arsenite of potash, extract or fluid extract of ergot, iron, cod-liver oil and quinine.

The *bromides* are certainly the best, and potassium bromide heads the list; sodium bromide comes next—the *mixed bromides* being usually better than any of them used singly. They can be advantageously combined with other drugs. The best combination for long use, he thinks, is (for a single dose),

℞.—Potassium bromide
Sodium bromide.....$\overline{aa}$ gr. xv.
Fowler's solution.....minims ij.
Conium juice ʒss (or fluid ext. conium, minims iii to v.)
Syrup orange (or bitter infusion) q. s.—Mix.

Potassium bromide and tincture of digitalis (mentioned also by Gowers) are only especially valuable in cases compli-

cated with weak heart or mitral disease. Mono-bromide of camphor has no advantages over the other bromides. Hydrobromic acid is efficient in very large doses, but sometimes irritates the stomach; and so much water has to be given with it that the amount to be swallowed is simply enormous. Borax is not of established value. Iodide of potassium, unless especially indicated by syphilis, is of little value when used alone. Chloral-hydrate is not of value when given alone; but with the bromides, in cases uncomplicated with cardiac disease, it sometimes makes a useful combination. He has also used Trousseau's belladonna treatment, but without noteworthy success. Cannabis indica is not to be relied upon. Cocculus indicus was used in six cases at the Philadelphia Hospital; none improved, and four were made worse by its use—one of the four becoming insane while taking the drug. He has used nitrite of potassium in seven cases; only one seemed to be temporarily benefitted, and some were made worse by its use. When the bromides had to be stopped, the zinc salts and the nitrate of silver are the best substitutes, but they can only be relied on for a short time.

The way to treat epilepsy medically is to simply have a plan of treatment and carry it out over a series of months or years. For instance, first put a patient upon a single bromide, say ten or fifteen grains three times a day, to be increased until a decrease in the number and severity of the paroxysms was produced. Keep him upon this perhaps for a month, and then use the mixed bromides, or some combination of bromides with other drugs—preferably the bromides, arsenic and conium prescription—watching the condition of the patient, and, if necessary, putting him on cod-liver oil, quinine and iron.

With reference to nitrates, bromates, etc., there is probably some chemical or chemico-physiological reason for their inefficiency. The *ites* and *ates* would probably *never* give as good results as the *ides*. Close attention should be paid to every point in the daily life of an epileptic—to diet, regimen, rest, and hygiene; but he does not believe that a genuine case of thoroughly-developed epilepsy can be cured, or even greatly benefitted without drugs.

Among the surgical and external means of treatment successfully used are excision of cicatrix, removal of neuroma, actual cautery, and blistering the neck or head. He does not use counter-irritation to the scalp, but believes in the actual cautery, used after Brown-Sequard's method, to the nape of the neck. [When definite indications call for it,

trephining, of course, should be resorted to. A case is reported in Echeverria, "On Epilepsy," in which a traumatic enlargement on the inner wall of one of the parietal bones, to which the dura mater was adherent, caused epilepsy. Removal of the injured portion of the parietal bone with the trephine cured the patient. The Senior Editor attended the case and assisted in the operation. A number of similar cases have been reported by other authorities.]

Chloral-Hydrate in Diphtheria.

Dr. C. H. Hughes, of St. Louis, Mo., in the *St. Louis Medical and Surgical Journal* for December, 1884, states that he employed chloral-hydrate in diphtheria as long ago as 1870, in nightly doses sufficiently to induce sleep during the active stages of the disease. The principle upon which this plan was adopted was that a nightly conservation of the wasting nervous energy was essential to maintain the vigor of the enervated organism. Quinine was freely given, and the muriate of ammonia during the wakeful hours. Some years later, he used chloral locally as an antiseptic. He illustrates his plan of treating diphtheria by reporting the case of his own child, Bessie, aged eight years, who came from school restless, nervous, feverish and thirsty. That night was passed in restless delirium, although quinine (gr. v) and potassium bromide (gr. x) were given. The next morning, she was indisposed to get up, was feverish and complained of her throat. There were numerous diphtheritic patches on the soft palate and fauces. Used the following:

℞. Chloral-hydrat.....ʒj.
Syr. tolut.....ʒj.
Aq. menth. piperit.....q. s. ʒij.
M.—S. Two teaspoonfuls, diluted with two tablespoonfuls of water, as a gargle four times a day. Also give internally at bed-time a teaspoonful in water. Repeat after midnight or towards morning if the child is then awake.

Twenty grains of quinine were given during the first twenty four hours, and a calomel purgative on the morning when the gargle was begun. During the third day, five grains of soda salicylate dissolved in spirits of Mindererus and lime syrup were given every four hours. This was continued three times a day on the fourth and fifth days—continuing the gargle three times a day, and giving one dose every night. On the sixth day, the child was free from throat symptoms or fever, and in eight days from the begin-

ning the child was out on the street. She was fed on malt and hot milk, though she had no appetite. This was not a case of malarial tonsilitis, but one of aborted or rapidly cured diphtheria.

Dr. Hughes thinks chloral the best remedy for diphtheria, not only because it saves the nerve centres from shock and exhaustion, but also because it is antiseptic. It ought not to be given so freely as to weaken nervous energy, but only so as to conserve it by adequate and timely restorative rest. Quinine and soda salicylate are not to be ignored as valuable adjuncts.

Yellow Fever and Cholera—How Recognized.

During the Annual Convention of the Delegates to the Sanitary Council of the Mississippi Valley, held in New Orleans, March 10th and 11th, 1885, it was agreed that, in the event of an epidemic or an outbreak of disease in any of the ports this summer, the following group of symptoms are to be accepted as indicating

YELLOW FEVER:

Group 1.—A person after a sudden attack has fever of one paroxysm, attended with marked congestion or blood stasis of capillaries of surface, conjunctivæ and gums, with a history of probable exposure to infection, and no history of a previous attack of yellow fever.

Group 2.—A person after a sudden attack has a fever of one paroxysm, followed by unusual prostration, albuminous urine, yellowness of conjunctivæ or skin, and having no positively authenticated history of previous attack of yellow fever.

Group 3.—A person has a fever of one paroxysm, albuminous urine, black vomit, suppression of urine, general hæmorrhagic tendency under circumstances where the exposure to infection is a possibility.

The following symptoms associated with a fever of one paroxysm in a patient who has apparently been exposed to infection, and who has never had yellow fever, indicate a *suspicious case:*

1. Suddenness of attack either with violent pain in the head and back, injected eyes and face, or with marked congestion of the superficial capillaries.
2. Want of that correlation between pulse and temperature usual to other forms of fever.
3. Albuminous urine.
4. Black vomit.

5. General hæmorrhagic tendency.

6. Yellowness of the skin.

The following cases shall also be deemed suspicious:

7. Any case respecting which reputable and experienced physicians disagree as to whether the disease is or is not yellow fever.

8. Any case respecting which efforts are made to conceal its existence, full history and true nature.

The following conditions shall be held to justify a suspicion of

CHOLERA:

1. Any case of disease resembling cholera and attended with "rice-water evacuations" shall be reported and treated either as cholera or as a suspicious case.

2. Any case respecting which reputable and experienced physicians may disagree as to whether the disease is true Asiatic cholera or not, shall be reported and treated as suspicious.

3. Any case rumored to be cholera, and respecting which efforts are made to conceal its existence, full history and true nature, shall be reported and treated as suspicious.

4. Any notable and exceptional increase in the number of cases of, and of deaths by, such bowel disorders as cholera morbus and diarrhœa shall be promptly reported.

Locomotor Ataxia—Its Diagnosis and Treatment in the Pre-Ataxic Stage.

Dr. D. R. Brower, of Chicago, read a paper on this subject before the Chicago Medical Society, March 16, 1885, which is reported in the *Weekly Medical Review* April 4, 1885. He thinks the pre-ataxic stage is usually overlooked as a result of a hasty examination. During this stage the disease is curable. The elements of diagnosis in this stage are (1) Sensory disturbances—lightning pains, (2) patellar-tendon reflex, (3) reflex pupillary disturbances, (4) reflex vesical disturbances, (5) disturbances of the sexual condition, (6) disturbances of the gastric functions, (7) disturbances of mental action, and (8) disturbances of muscular function. The first three are the most valuable diagnostic points.

1. As to the *sensory disturbances*, the peculiar sudden pains are like electric shocks, violent blows, stabbing with knives, or burning with hot irons; sudden spots of hyperæsthesia and anæsthesia develop in the lower extremities that are severe but transitory. The pains often localize themselves in spots on the surface about the size of a silver dollar, and

may last a few hours and disappear as suddenly as they began, returning usually in other spots after a few months or years. They are sometimes deep in the soft tissues or bones of the extremities; at other times they are not localized, but present all the appearances of ordinary neuralgia, and again in some cases the pains are entirely absent.

2. The *patellar-tendon reflex* is diminished or lost, although exceptionally the knee-jerk is normal. When this is so, Dr. Brower thinks the sclerosis must have commenced above the lumbar enlargement. This "reflex," however, is probably absent in about two per cent. of healthy persons. In order, therefore, that the absence of this reflex may have diagnostic significance, it should first be known whether or not the person ever possessed the usual knee-jerk. The "reflex" being abnormally absent, the integrity of the muscular structure of the quadriceps femoris may be determined with electricity and mechanical stimulation. If the muscle contracts upon a tap over its surface, or responds to faradization, the muscle is healthy and the sign is diagnostic.

3. The *pupillary reflex* is diminished or lost. The pupils may be contracted equally, or one dilated or normal and the other contracted; but the loss of reflex action to light, and the absence of dilatation of the pupil on stimulus applied to the surface of the neck, accompanied by a normal condition in efforts at accommodation, is the most striking symptom. The pupil will dilate in a strong effort at distant vision and contract in a powerful effort at close vision. Temporary double vision is common, and may last a few hours, disappear, and return in a few months, or it may continue a few days and not again appear. Color blindness is very frequent, the ability to distinguish red and green being first lost.

4. *Vesical reflex* at the beginning of the pre-ataxic stage is variable. Usually the bladder is irritable, but this soon gives place to diminished reflex acuteness; and instead of a frequent desire to micturate, the patient slowly drifts into a condition quite the opposite, so that there may be no demand for urination oftener than twice in twenty-four hours. This is accompanied with diminished muscular tone of the bladder-walls, so that there is difficulty in starting the act, and the stream, instead of being projected forcibly forward, falls abruptly or simply dribbles; the patient is often unable to determine when the act is finished, and must use his eyes to determine it.

5. The *sexual condition* is first irritable, soon replaced by a diminution of desire and capacity for intercourse, which may in turn be followed by nocturnal emissions.

6. *Gastric disturbance* is manifested by attacks of violent nausea, persistent vomiting and pain. Dr. Brower had a case where gastric trouble was the only prominent symptom for five years. The attacks recur at intervals varying from a few weeks to a few months; the patient also has dilated pupils with loss of patellar-tendon reflex, and occasionally has attacks of lightning pains.

7. The *mental condition* is usually altered; the patient has fits of melancholy, becomes morose, irritable, timid, very emotional, will shed tears on the least provocation, loses, for a time at least, his interest in business, and to a certain extent his usual ability in business transactions.

8. The muscular system in this stage is weak. There is no ataxia, but there is a sense of weight and weariness in the limbs, with difficulty in going up stairs. The condition is quite like that experienced in neurasthenia.

The *foundation for the successful treatment* of the pre-ataxic stage of this disease is *rest*—absolute, positive, and prolonged. The recumbent posture should be maintained for several months. This treatment is an innovation, but is based upon the fact that a diseased organ should have its functional activity reduced to a minimum. This principle applies with equal force to the spinal cord; for rest, accompanied as it is with diminution of nutriment, activity of nerve fibres, and diminution in the calibre of the blood-vessels, must be antagonistic to the pathological process that has begun. But it is necessary to maintain (as Dr. Weir Mitchell has taught in his treatment of hysteria) the greatest activity of general nutrition, and prevent wasting of the muscles. The judicious use of massage and passive movements will enable us, in a case of locomotor ataxia to replenish the muscular system in the recumbent posture.

The diet should be the most nutritious. Cod liver oil and the syrup of the hypophosphites are often of great service. The emunctories should also be constantly attended to.

The galvanic current of mild intensity, used daily after the method of general galvanization, is of service. Its alterative and tonic properties assist in modifying the pathological process. The electrode applied to the spine should be large. The electric brush, with the faradic current to the back and lower extremities, will by reflex action assist in breaking up the morbid condition, as well as maintain a more healthful condition of the parts during the treatment of rest.

Syphilis, Dr. Brower thinks, is probably the foundation of almost every case of locomotor ataxia. In the cases that

came under his observation, the treatment of the primary and secondary symptoms of that disease was not energetic or sufficiently long continued, and was therefore without doubt a predisposing cause of locomotor ataxia. To guard against the danger of locomotor ataxia mercury and iodide of potassium should be used boldly, and continued at least two years after the development of syphilis, so that their combined forces may drive out every germ of the specific trouble. If the disease has begun, then antiphlogistic remedies must be used; mercury should be pushed to a point short of salivation, and iodide of potassium given in drachm doses three times a day, or in larger amounts if it can be tolerated. Iodide of sodium, while not so efficient a remedy, is often better tolerated. Effervescing Vichy salt is a desirable corrective for these large doses of iodide of potassium and mercury.

In cases that are non-syphilitic, or do not improve under energetic antiphlogistic treatment, argentic nitrate may be given with advantage in doses from gr. $\frac{1}{4}$ to gr. $\frac{1}{2}$, combined with some excipient that will not decompose it. It is to be administered before meals. One of the wants of success attending the use of silver nitrate is due to the difficulty of getting it into the blood without decomposition. Dr. Brower has used hypodermically with satisfaction the hyposulphite of silver and found it to be non-irritating, a grain and a half being used daily until ninety grains have been administered.

Another drug of undoubted value is ergot, in fluid drachm doses three or four times daily. Cold bathing in a temperature of 65° F. to 70° F. is also of service.

Hot baths are highly injurious; strychnia should be avoided.

In the discussion, Dr. H. Gradle recited the first case on record, where Laundolt, in 1875 or 1876, stretched the sciatic nerve, that resulted in curing the patient of locomotor ataxia, who subsequently died of some other disease. The spinal cord, with the posterior roots of the zones, were found healthy.

Dr. G. C. Paoli stated that but few cases of stretching the sciatic nerve for any difficulty resulted in benefit. Regarding syphilis as the most frequent cause of the disease, his experience did not accord with the views set forth in the paper. Duchenne was the first to announce that masturbation is the cause of the greatest number of cases, and he believed this to be true. Among the first symptoms he had noticed were exhaustion of the nervous system, muscular

fatigue, with little or no pain. Syphilis, no doubt, is a cause of the disease where a subject has not been properly treated, and the improper use of mercury may produce it. So, too, does it occur in the lower stages of society, where people live in damp, illy-ventilated apartments. To give iron in abundance in this disease will produce irritation of the mucous membrane of the alimentary canal. He thought, however, it should be given in light doses with iodide of potassium, and follow the methods suggested by the writer of the paper.

Dr. R. Tilley said the pre-ataxic stage may extend over a period of thirty years; it is therefore difficult to determine whether this is another disease or not. He thinks syphilis is mentioned as by far the most frequent cause in the majority of cases. One of the symptoms, not mentioned by the writer, is the difficulty a patient has during the pre-ataxic stage of walking backward. In a lady that he treated, having incipient locomotor ataxia, one peculiar symptom was that when she stooped forward she had to keep her eyes open, nor could she stand still or stand erect unless she kept her eyes open. Regarding the inability to distinguish green or red in the early stage, this does occur. Hot baths immensely disturbed the process of curing these cases; and with a Turkish bath there would be experienced the same difficulty, for a patient would lose consciousness while in the hot room. He did not think taking too much mercury caused the disease.

Dr. Brower stated that there is much uncertainty in the pathology of the disease. Some regard it as a neuritis; others as of cerebral origin. He regards it as a sclerosis of the posterior roots of the zones. Regarding masturbation as a cause, he cannot agree with Dr. Paoli in this, but thinks it produces functional disturbance instead. Relative to the phenomena a patient experiences in walking backward, this is exceptional, and there is no incoördination of muscles.

Nasal Polypi, it is said, can be readily cured by the injection of a solution of a scruple of tannic acid in a fluid drachm of water. Ten to twenty minims of the solution are to be injected into the polypus. The polypus shrivels, dries up, and comes away without pain or trouble.

Oxide of Zinc, according to Professor Peterson, of Kiel, is just as *good as iodoform in the treatment of wounds*, is not poisonous, is cheaper, and does not smell offensively.

Book Notices, &c.

A Text-Book on Practical Medicine. Designed for the Use of Students and Practitioners of Medicine. By ALFRED L. LOOMIS, M. D., LL. D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the city of New York, etc. With 211 illustrations. New York: Wm. Wood & Co. 1884. 8vo. Pp. 1102. Cloth. Price, $6. (For sale by West, Johnston & Co., Richmond, Va.)

This valuable work, by one of the best teachers and clinicians of our time, will at once take rank as a standard authority in this country. It is distinctively a treatise on American practice. As is well known, many of our diseases, and much of our treatment, differ in a considerable degree from the disorders and therapeutic usages common to the mother country, and it has plainly been the desire of the distinguished author to present to his readers the types of disease "commonly observed by the American physician." During the eighteen years in which Professor Loomis has been engaged in didactic and clinical teaching, he has so thoroughly covered the ground occupied by every disease likely to be met with by the general practitioner of the United States, that his dictum as to diagnosis and treatment may be implicitly relied upon, and this volume seems so full and complete on the subject of practical medicine that probably several years must elapse before a revision will be required. His classification of diseases, although differing in some degree from that of other authors, is of course excellent, as it is that which he has found best to follow in his teaching. He does not offer, to any considerable extent, opinions regarding unsettled questions in medicine, but gives in a concise series of foot-notes all the information possible regarding them, thus making a saving of space for more important text. Although it seems difficult to praise any one portion of the book at the expense of the others, yet that section relating to Diseases of the Respiratory Organs—to those who have attended his clinics in the amphitheatre of Bellevue—seems the most carefully written. Notwithstanding the great and well-deserved reputation of Austin Flint, Sr., as a teacher in this special department of medical science, we think it next to impossible to surpass Professor Loomis as a clinical lecturer on these disorders, and even a comparatively hasty glance through the first section of the volume shows that he can wield the pen as ably, and in as interesting a manner, as he could present orally to a class of students the

valuable points connected with cases of pleurisy, phthisis, pneumonia, etc. This book is an invaluable addition to the doctor's library. C.

A Manual for the Practice of Surgery. By THOMAS BRYANT, F. R. C. S., Surgeon to, and Lecturer on Surgery at Guy's Hospital, London, etc. With Seven Hundred and Seventy-Seven Illustrations. Fourth Edition. Thoroughly Revised. Philadelphia: Henry C. Lea's Son & Co. 1885. 8vo., pp. 1038. (For sale by West, Johnston & Co , Richmond, Va.)

The fourth American from the fourth English edition is, as the publishers announce, thoroughly revised; but so complete in its details was the previous edition that even the care exercised by Mr. Bryant himself has produced little change. The only reason for that was because the book has been, and is, acceptable, as it was written (after the ready pen of our countryman, Dr. Roberts, had a very few years ago brought the subject-matter down to the latest time), the consequence being that very little of the verbiage and expressions required alteration or improvement. Several years ago Mr. Bryant paid Dr. Roberts the compliment of accepting many, if not most, of the additions the latter had made in an edition published for use in this country, so that the book before us has something of an American character, notwithstanding the fact of its being an English work. Bryant's surgical teaching, as displayed in this well-known volume, will always rank with that of the authorities in the profession; and no general practioner's library is completed on this subject without the presence of this work on the shelves. C.

The Principles and Practice of Gynæcology. By THOMAS ADDIS EMMET, M. D., LL. D., Surgeon to the Woman's Hospital of the State of New York, etc. Third Edition. Thoroughly Revised. With One Hundred and Fifty Illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884. Pp. 786. (For sale by West, Johnston & Co., Richmond, Va.)

Dr. Emmet has felt the necessity—in view of the constant change in gynæcological practice—to almost entirely re write his standard work on this subject, and so doing he has omitted some matter now without value, and added a considerable amount of new material. In fact, this third edition may be considered almost a new book. It is written in that careful and interesting style only attained by an author when his whole heart and mind are devoted to the special subject of his pen, and a work of that kind has always something more than an ephemeral popularity. In this book Dr

Emmet offers new views and original ideas on several subjects, such as laceration of the vaginal outlet and through the sphincter ani and perineum; on the methods of partial and complete removal of the uterus for malignant disease; on the surgical treatment of fibrous ulcers; on diseases of the Fallopian tubes; and on urethral diseases; making one hundred and seventy-five new pages. Dr. Emmet is decidedly opposed to present methods of intra-uterine medication, as entirely disagreeing with sound pathological views, and hopes the time is not far distant when his ideas in this respect will be acknowledged as correct, to the physical advantage of the female sex. He thinks that not enough attention is paid to those intra-uterine inflammatory diseases which are the common form of gynæcological disorder, and that if more care was taken in that direction, less fault would be found with the specialist in his failures to cure. He also believes that the exciting causes of reflex disturbance are not so generally admitted as they should be by the profession, as they will be not many years hence. In the enunciation of all these points Dr. Emmet is pleasantly emphatic, and in a manner well adapted to the use of one of our greatest gynæcologists, since the death of the master—Marion Sims. No doctor can read the work without great profit. C.

The Physician Himself, and What He Should Add to His Scientific Acquirements in Order to Secure Success. By D. W. CATHELL, M. D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore. Fourth Edition. Enlarged by the addition of nearly Three Hundred New Suggestions. Baltimore: Cushings & Bailey. 1885. 8vo. Pp. 284. Cloth. Price, $2. (By mail from author.)

Again we have to commend this excellent work, in its fourth edition of three thousand. It seemed, two years ago, that the book could bear no further improvement, but we find the copy before us not only enlarged and in some portions rewritten, but also containing advice and practical suggestions which had been omitted in previous editions. Dr. Cathell is to be congratulated on his possession of that peculiar art of telling exactly what his reader desires to know, and at the same time giving him the information in an impressive and pleasant form. We look upon a young doctor's library as lacking in its most important particular if it does not contain this book. By its means he is enabled to add to the natural enthusiasm of youth, and the theoretical knowledge of his profession, the practical wisdom which is perhaps not often found except in very superior elderly physi-

cians. The author of the book is not satisfied with simply laying down worldly rules for success, but also inculcates the necessity of fulfilling the various duties to one's fellow-man and his Maker which require the practitioner to lead a pure life. The aspirant for success in our profession who will faithfully follow the precepts laid down by Dr. Cathell may be not only sure of his ultimate aim, but will become one of the respected practitioners of his day. Some few critics have made sneering reference to the "so-called practical advice" given in the volume; but as a physician is simply an individual endeavoring to win his way through the world, fairly and honestly providing for those dependent upon him, we fail to see that Dr. Cathell has written anything yet that the severest moralist has a right to cavil at. We hope to see a fifth edition soon. C.

Cocaine and its Use in Ophthalmic and General Surgery. By H. KNAPP, M. D., Professor of Ophthalmology in the Medical Department of the University of the City of New York. New York and London: G. P. Putnam's Sons. 1885. 8vo. Pp. 87. Cloth. Price, 75c. (For sale by West, Johnston & Co., Richmond, Va.)

To Dr. H. D. Noyes, of New York, travelling at the time in Europe, belongs the distinction of first introducing to the notice of the American profession the local anæsthetic value of this drug, by means of a letter to the *Medical Record*, October 11, 1884. There he recounts the advantages claimed for it by Dr. Koller before the German Ophthalmological Society, which met in Heidelberg the previous month, in which report the talented young German experimenter showed conclusively its power in paralyzing the sensory nerves of mucous membranes. As soon as the letter of Dr. Noyes was published, the progressive medical men of the United States began their clinical experiments with it, and were indeed working with the salt in their hospital practice two weeks before the first authoritative publication of Dr. Koller's paper. The specialists on diseases of the eye in New York city, having the best opportunity for a quick use of the drug, soon reported in confirmation of its wonderful anæsthetic power over the superficial portion of the eye; and this little volume gives—besides the contents of the paper originally read by Dr. Koller—the statements of the different ophthalmologists who then experimented with it. Not satisfied with its excellent effect upon the eye in operations upon or about that organ, other surgeons employed it upon mucous membranes accessible in other parts of the body, and Dr.

Knapp has carefully gathered together the testimony of those using it, until he has been enabled to present to us a book including the evidence of reliable men who have experimented with cocaine upon every portion of the mucous membrane of the body which required a local anæsthesia. To this has been added full essays on the "particular use of cocaine," by various writers, and the reader will be surprised to see the numerous fields of usefulness to which this alkaloid and its salts are apparently dedicated. C.

The Therapeutics of the Respiratory Passages. By PROSSER JAMES, M. D., Lecturer on Materia Medica and Therapeutics at the London Hospital Medical College, etc. New York: Wm. Wood & Co. 1884. 8vo. Pp. 316. Wood's Library of Standard Medical Authors; November. (For sale by West, Johnston & Co., Richmond, Va.)

This work, as the writer announces in his preface, is not well suited for the beginner in the study of medicine. We have so many full "manuals" presented to the public nowadays—often of great value—which profess to be fitted not only to the wants of the practitioner but also to those of the student, that it is something of a relief, and almost a surprise, to find one written entirely for those who are supposed to have reached a position where they can thoroughly understand and fully appreciate a first-class work on a special subject like this We can honestly say that we have never—during twenty years' medical reading—examined a book treating of this, or a kindred subject, superior to the one we write of. If Prosser James had before this written nothing, the present volume would give him reputation; as it is, it adds even to the high esteem he already enjoys in the minds of the advanced members of the profession. The modest, plain style of the author increases the attraction felt by the reader in examination of the material of the book, and we doubt if any one can lay it down after perusal without feeling that an important and valuable collection of facts has been presented for his consideration. There is scarcely a chapter in the book but contains much new food for thought and study, but we should recommend the fifteenth—on Denutrients—as one particularly adapted for the careful student. The succeeding chapter, on Antipyretics, deserves close attention, giving as it does full details of our old-established and newly-discovered means for reducing heat-production. The chapter on Neurotics contains a most interesting practical statement of the therapeutic qualities of atropia, and we think no physician can read that part of the book referring

to Pneumatics without feeling amply repaid. The chapters relating to Aids to Digestion, and Transfusion, are as full and complete as a careful examination of medical literature could make them, and reflect much credit on the persevering study of the author. C.

The Formation of Poisons by Micro-Organisms—A Biological Study of the Germ Theory of Disease. By G. V. BLACK, M. D., D. D. S. Philadelphia: P. Blakiston, Son & Co. 1884. 12mo. Pp. 178. Cloth. Price, $1.50. (For sale by West, Johnston & Co., Richmond, Va.)

The matter of this book consists of a series of lectures delivered before the students of the Chicago College of Dental Surgery and some professional men who were specially interested in the subject. In consequence of this the work is not as full and complete as if written consecutively for publication, but the experiments and observations given are in themselves fully adapted to explain the points raised by the author. He has endeavored in these lectures to condense the general information gathered from different sources into a form which may be readily understood by the student interested in the study of this especial subject, and with a very fair degree of success. The only question to be determined as to the value of the book is, whether he has in his condensation omitted any of the primary facts in relation to the germ theory of disease and its development. He gives a very full attention to the history of this interesting subject, nearly half of the volume being taken up with an examination of this portion of the study. The last half of the book is devoted to a consideration of the relation of micro-organisms to the production of disease, the yeast plant, waste products, poisonous products of micro-organisms, and matters of like nature. An appendix is given—the subject being "Dental Caries"—which, it seems to us, must be well worth the careful study of the dental practitioner. The book as a whole is apparently a well-condensed presentation of our existing knowledge of the subject referred to in the title. C.

Diseases of the Urinary and Male Sexual Organs. By WILLIAM BELFIELD, M. D., Pathologist to the Cook County Hospital; Surgeon to the Genito-Urinary Department, Central Dispensary, Chicago, Ill., etc. New York: Wm. Wood & Co. 1884. 8vo., pp. 351. (For sale by West, Johnston & Co., Richmond, Va.)

Dr. Belfield has endeavored in his book to give more than the attention usually given in works of this kind to the important subject of means and methods of diagnosis in dis-

orders of the class mentioned. He is one of those who believe that too much stress is laid upon routine and general treatment of urethral, prostatic and kidney diseases in the literature of the present day relating to that department of medicine and surgery, and would impress more strongly than most writers the absolute necessity of a careful study of the pathological factor in deciding as to required treatment. The main portion of his book deals with a very careful consideration of this branch of his subject, and despite his excuse for its crudeness and incompleteness, we fancy that he has given us a great deal that is extremely valuable. It is not that he shows us new means for pathological study, but that he so well urges the thorough adoption of those we already are acquainted with, and endeavors to explain clearly the necessities every day arising which should compel us to use them.

His chapter on Urethral Fever is worth examination by every physician whose attention has been directed in the last few years to that special subject by the discussions before the London Medical Societies. The chapter referring to Urinal Pathology is one of the best in the book, although not perhaps more practically valuable than that on Albuminuria, which shows a great amount of investigation. An exceedingly complete, yet concise, chapter is devoted to Clinical Examination of the Urine, and the general diseases of the kidney, bladder, and prostate gland, receive full consideration. As far as we can see, the treatment recommended is based on that of the best authorities; but above and beyond all else, the author is to be critically commended for his attempt to draw more attention to the need of more careful study of diagnostic signs of disease in this region of the body. C.

Modern Medical Therapeutics: A Compendium of Recent Formulæ and Specific Therapeutical Directions. By GEORGE H. NAPHEYS, A. M., M. D. Edited by JOSEPH F. EDWARDS, M. D., and D. G. BRINTON, M. D. Eighth Edition, Enlarged and Revised. 8vo. Pp. 629. Price, cloth, $4; sheep, $5. Philadelphia: D. G. Brinton. 1885.

This useful book appears for the eighth time, bringing the art of applied therapeutics down to the close of 1884. The revision has been searching, and the additions have been many. In spite of dropping much that has not stood the test of experience, and of relegating the section on Diseases of Children to another volume, the present edition is more bulky than those which preceded it—the new matter amount-

ing to about 150 pages. This new matter embraces most things of value that have appeared during the last four years relating to treatment.

Singling out some of the novelties, we may note the antiparasitic treatment of phthisis, precise nerve vibration in locomotor ataxia, the plan of subcutaneous nerve-tension in sciatica and neuralgias, the radical treatment of hay fever, the direct method in post-nasal catarrh, the control of emphysema by elastic respirators, etc.

Of approved new remedies we note the use of kairin in pneumonia and rheumatism, of naphthaline in bronchitis, cotoin in cholera, pitzahoic acid in obstinate constipation, trichlorphenol in dysentery, kreochyle and midza ame in wasting diseases, brayera and aspedium marginale in tenia, resorcin in chills, eserine in chronic diarrhœa, arlentin in dysuria, paraldehyde in insomnia and insanity, helenin in bronchitis, nickel bromide in epilepsy, napelline in neurasthenia and neuralgia, codeia phosphate and diethylacetal as hypnotics, chloro-phosphide of arsenic in neuralgic disorders, the anodyne, tannate of cannabine, manaca for rheumatism, the expectorant cheken, the heart tonic convallaria majalis, etc. Various diseases are introduced, not in former editions, as insanity, suffocative bronchitis, paroxysmal hæmaturia, etc. The editors have gleaned carefully the whole field of medical literature, both periodicals and books. In addition, they obtained by personal correspondence with leading physicians a considerable number of details of treatment and formulæ which have never been previously published.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Ambulance Service in Philadelphia. By DE FOREST WILLARD, M. D., Surgeon to the Presbyterian Hospital, Phila., Pa., etc. [An interesting description of ambulance service throughout the country, with especial reference to that of the city named. An address delivered at the Academy of Music April 30, 1883.] Pp. 24.

Is Gonorrhœa a Bacteria Disease? By NEWBERRY A. S. KEYSER, Student of Medicine in the University of Maryland. [This study follows the line of Neisser's investigations, and the writer believes fully in the existence of a peculiar gonorrhœal micrococcus.] (Reprint from the *Maryland Medical Journal*, February 15, 1883.) Pp. 8.

Editorial.

Our Twelfth Annual Volume—Important Notice.

We begin our twelfth annual volume with this April issue. We trust that our subscribers and advertisers will be pleased with the improvements which they will see we have made in the journal. Our earnest efforts will be continuously bent hereafter upon making the *Virginia Medical Monthly* an indispensable help to practitioners. We hope friends everywhere will be sufficiently pleased with the success of our efforts to aid us by their subscriptions and by their influence with other practitioners. There is no better time to begin subscription than with this April number. A great majority of annual subscriptions expired with the March issue. We hope all parties will promptly renew for annual Volume XII, and not delay in making Postal Money or Registered Letter remittances for same. The cost to us of collecting local bank checks—outside of Boston, New York, Philadelphia, Baltimore, Washington and Richmond, is from twenty-five to fifty cents each. Where the banks charge us for collecting the cash for checks on them, we must deduct the amount of such charge from the face of the checks we received.

The Annual Meeting of the Association of American Medical Editors for 1885

Will be held in New Orleans, La., April 27th, at 8 P. M., in the Medical College building. The Annual Address will be delivered by the President, Henry O. Marcy, M. D., of Boston, Mass., on "The Legislative Establishment of Medical Examining Boards in America." Papers are expected from Drs. F. E. Daniel, of Austin, Texas; F. S. Billings, of Boston, Mass.; Richard J. Dunglison, of Philadelphia, Pa.; John V. Shoemaker, of Philadelphia, Pa.; L. Connor, of Detroit, Mich., and others. All members of the profession are cordially invited to be present and participate in the meeting, especially journalists and authors. The Secretary is Dr. H. O. Walker, of 33 Lafayette Avenue, Detroit, Mich.

Virginia State Board of Medical Examiners.

A new era for the profession of Virginia has begun. The sitting of the State Board of Medical Examiners in this city April 8th and 9th was the beginning of a long sought and a permanent benefit to the people and the profession of this State—a benefit which, indeed, will soon extend to other

States and thus result in general good. We refer our readers to pages 34–41 inclusive of this number of the *Medical Monthly* for a full synopsis of the proceedings of the session.

As one entered the Hall of the House of Delegates where the examinations were being held, he was at once impressed with the air of earnestness that was worn on every countenance. The well-selected Board of Examiners in attendance felt the grave responsibilities resting upon them, and with courtesy to each of the applicants, yet with partiality towards none, they faced their duty and did it well. The applicants for examination were an exceptionally fine looking body of men—trained to manners and to study. A feeling of sympathy was natural for each of them as they were undergoing this trial.

The list on page 41 includes all to date who can enter the Virginia profession since January 1st, 1885.

A review of the examination questions will show that they were mostly practical—that they were such as related to matters that would most probably be confronted as the door to enter upon practice was opened. We heard of complaints that were made as to the questions propounded in only one department—that of chemistry. If the questions submitted are open to criticism by us, that single criticism would be that, in view of the general purpose of this post-graduate examination, and the time allotted for the examinations on the seven other branches, *comparatively* too much prominence was given to chemistry. Fewer questions that would have tested as effectually the knowledge of the applicant might have been put, and thus not have run the risk of disheartening the applicant before the more practical questions for the physician, surgeon or obsetrician were reached.

Some have suggested that the questions asked by the Board involved greater acquirements on the part of applicants for practice than were demanded of our fathers who have become eminent in the profession. Such a suggestion has no influence in restraining the Board from demanding answers to the very class of questions that were asked. We would be laggards, indeed, if our generation made no improvements upon what our ancestors handed down to us. Holding fast to the truths that are established, we should earnestly seek to unearth other mines rich in useful knowledge. The parable of him who hid the one talent given to him and of him who multiplied the ten talents committed to him, should ever be kept in mind by whoever has a trust in charge.

It speaks well for the standard of graduation of the two Medical Colleges in this State—the Medical Department of the University of Virginia and the Medical College of Virginia—that of those who stood the examinations before the Board, not one of them was not granted a certificate, whereas only about 28 or 29 per cent. of the graduates of all other medical institutions of the country were successful on the very same examination. It need scarcely be said that such a result was altogether without the plan, intention or knowledge of the Examiners—few of whom knew where any of the applicants graduated. But this result is in pretty accurate keeping with the record of these Virginia educational institutions when their graduates are examined by other Boards of Examiners. We refer, for instance, to the records of examinations for positions in the Army and Navy.

The effect of results like that which has just occurred before the Virginia Board of Examiners will have a beneficial —a stimulating influence upon the Faculties of Colleges outside of Virginia. Sooner or later other States will establish Boards of Medical Examiners, and their questions will be of the same general practical value as those adopted by the Virginia Board. No one can complain that the standard adopted is too high—75 per cent. Many even now think the standard should be 80 per cent. The Colleges that do not pitch their standards fully as high as the various State Boards of Examiners will soon find themselves behind the times. Many motions and suggestions have been made in and out of College Faculty conventions looking to the elevation of the standards of graduation. The people have wanted the security and the profession has begged for the *proper* graduation of medical students. The time is at length at hand when, if the Colleges, which should be the leaders, will not march as the advance column, the profession will appoint other leaders, and this it is doing all over the country by the establishment of their State Board of Medical Examiners. The Virginia Board, at least, is determined that their examinations shall not prove a farce.

Dr. Edward Warren's Autobiography.

We direct special attention to the advertisement of Dr. Edward Warren's (Bey) forthcoming book, entitled "*A Doctor's Experience in Three Continents*," which can not fail to prove both interesting and instructive. Dr. Warren's known ability as a writer, his reputation as a physician and a pro-

fessor, and his varied experiences in all relations, both at home and abroad, cannot fail to render his work attractive, both to the profession and the general public. We predict for it a rapid sale and a general popularity. Orders received at this office for the book, accompanied by the price, $2.25 (two dollars and twenty-five cents), will be promptly attended to.

Excursions to Europe.

A number of attractive excursions during the coming spring and summer are announced by Messrs. Thomas Cook & Son, the well-known tourist agents of New York and London, which are arranged on the most popular scale of prices. Full programmes of these trips, with maps showing the routes followed, are to be found in their monthly paper, *Cook's Excursionist*, published at 261 Broadway, New York, which they announce will be sent by mail to any one interested on application.

The American Journal of Neurology and Psychiatry, published by Messrs. B. Westermann & Co., of New York, discontinued publication with the April issue, 1885—the end of Volume III.

Dr. Stanford E. Chaille, of New Orleans, has been appointed by the President to fill the vacancy in the National Board of Health, caused by the death of Dr. S. M. Bemiss.

Obituary Record.

Dr. Thomas Bryson Ward.

The subject of this notice, one of the most prominent and popular physicians of Norfolk, Va, died rather suddenly at his home, of malarial poisoning, on the morning of April 2, 1885. He was born in Norfolk, Va., December 6, 1838, and hence, at the time of his death, was forty-seven years of age. He received his medical diploma from the Medical Department of the City of New York in 1859. He then served a term as House Surgeon in the New York Hospital. After this he moved to Norfolk, where he began practice; but on the proclamation of the civil war he volunteered in the Confederate States Army. He was soon appointed Surgeon in Mahone's Brigade, where he rendered gallant and efficient

services. He afterwards became President of the Special Examining Board of Surgeons, at Columbia, S. C. After the war he returned to Norfolk, where he established himself as *the* surgeon of the city, which rank was generally accorded to him by his professional brethren, as well as the public. He was a member of the Norfolk Medical Society, of which he is an ex-President. He took active interest in the Medical Society of Virginia, which he joined in 1871, and of which he has been one of the Vice-Presidents. For many years he was surgeon to St. Vincent's Hospital, of Norfolk. At the meeting of the Medical Society of Virginia, 1884, he was elected a member of the State Board of Medical Examiners, to serve for a term of four years, dating from January 1, 1885. His honors were numerous and his friends many. His death will be felt as a public loss.

Dr. James Lawrence Little.

This eminent surgeon of New York city died at his home April 4th, 1885, from peritonitis. He was born in Brooklyn in 1836. He graduated from the College of Physicians and Surgeons of New York in 1860. He served on the surgical staff of New York Hospital until the spring of 1862, when he entered the United States service and was placed as Surgeon-in-charge of the Park Barracks in New York city until the end of the war. During the war he served as assistant to the surgical clinics at the College of Physicians and Surgeons. After the war, he was appointed one of the Surgeons to St. Luke's Hospital, and later also Surgeon to St. Vincent's Hospital. He was Professor of Clinical and Operative Surgery in the New York Post-Graduate Medical School and Hospital, and Professor of the Principles and Practice of Surgery in the Medical Department of the University of Vermont at the time of his death. He was a member of a number of medical societies, and received many honors from the hands of his professional brethren. He was a self-made man. He was especially well-known because of his making immovable dressings manageable by his simple and effective plaster-of-Paris splint, and because of his simplifying Allarton's operation of median lithotomy. He was a devoted husband and a father, and a blank will be felt in the profession due to his untimely decease.

Floyd Barr, son of Dr. William F. Barr, of Abingdon, Va., died at his father's home March 22, 1885, after an acute sickness; aged twenty years.

VIRGINIA
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RICHMOND, MAY, 1885.

Original Communications.

ART. I.—**Drainage through Douglas's Cul-de-Sac in Ascites.**
By HUGH M. TAYLOR, M. D., Visiting Surgeon St. Luke's Hospital, etc., Richmond, Va.

We are often enjoined to give our ideas time to ripen and a chance to be tested in the crucible of experiment before inflicting them upon others. Regardless of this warning from those who, in after years, have had to retract the doctrines enunciated in their youth, we venture to advance a theory in regard to the treatment of some forms of ascites which has not, as far as we know, been subjected to a trial. It will probably be claimed, even if practicable, that the treatment is only palliative. We contend that, if the urgent symptoms of a bad case of ascites can be palliated, valuable time will be gained; and as it is only to be thought of in connection with bad cases and as a last resort, we think it within the bounds of legitimate surgery.

Several months ago, a patient who was supposed to be suffering with ovarian dropsy was placed under our care. Previous to that time she had been tapped by a very competent surgeon, who afterwards informed her that she had no ovarian tumor; and while we had much doubt as to the exact

nature of the trouble, there were many indications which led us to believe that it was of a cystic character, and we felt justified in making an exploratory incision for diagnostic purposes. When the transversalis fascia was divided, the peritoneum was found to present a very curious appearance. It was as much engorged and as blue or mottled as that of a strangulated hernia, showing that, from some cause, the circulation through the peritoneum was very much interfered with; and this stasis could not exist to any great extent without a free exudation of serum. As soon as the peritoneum was punctured, the fluid allowed to escape and the pressure thereby removed, the discoloration faded as perceptibly as when the stricture of a strangulated hernia is divided. The patient recovered quickly from the operation, and during the time of her convalescence and before the fluid re-accumulated, she gained much strength and flesh, took regular exercise, enough food, and was in every respect in a more favorable condition.

In ascites from obstructed vena cava, portal or hepatic circulation or from imperfect circulation and action of the absorbents of the peritoneum, and in that from other causes, we finally arrive at a time when stimulation to greater activity of the skin, kidneys and bowels fails to remove the fluid as fast as it forms, and paracentesis has to be resorted to. In a majority of such cases, it is usual to note a rapid and continuous improvement of the general health of the patient after each tapping, lasting until digestion, assimilation, circulation, etc., are again interfered with by the re-accumulated fluid.

It occurred to us that, if the fluid could in some way be continually drained off, we could maintain the point gained after the tapping, and though the remedial measure be conceded to be only palliative, we would at least make the patient more comfortable, secure time in which to treat the cause of the ascites, and have a better prospect of success, in as much as we would have the patient's system in a more favorable condition to respond to treatment. We had seen the pleural sac opened, and a drainage tube worn for many months; we knew that the pericardial sac had been tapped

and drained, and in several instances, weeks after an ovariotomy, we had seen the cul-de-sac of Douglas opened, a drainage tube introduced, and for the same length of time the peritoneal cavity flushed out without, as far as we could tell, the least rebellion on the part of the peritoneum to the operative interference. No serious local or constitutional disturbance could be credited to the presence of the tube. This experience led us to believe that in some cases of ascites we could tap the peritoneal cavity through Douglas's cul-de-sac and by means of a drainage tube worn constantly, drain off the fluid as fast as it forms. Of course our remarks apply only to the treatment of ascites in women, and it is more than probable that it is not applicable when the ascites is due to advanced renal, cardiac or pulmonary disease, but should be limited to those cases resulting from circulatory interference in the portal or hepatic veins and the inferior vena cava. To morbid conditions of the peritoneum and to those cases due to miscellaneous causes, such as cold, etc., and, moreover, in view of the fact that in some very few cases the fluid does not re-accumulate after tapping, it may be that the operation is not justifiable until several tappings have been resorted to. In any event, we think it is only to be thought of when the symptoms are urgent and as a last resort.

In a few weeks after the exploratory incision, the fluid re-accumulated, life again became a burden, and the patient's general health began to suffer. As we had had time to give the matter careful thought and were satisfied that the treatment could be carried out with a reasonable prospect of success, and was within the province of safe and legitimate surgery, we determined to make the attempt.

There were three prominent steps in the operation to be noticed. First, we had to tap the cul-de-sac. Second, to introduce a proper tube; and third, to fix the latter so as to guard against its slipping out. The facility with which the first step could be safely taken depended largely upon the amount of distension of the cul-de sac. If very much distended, there would probably be little danger of transfixing the rectum; and if fully occupied by fluid, there would be

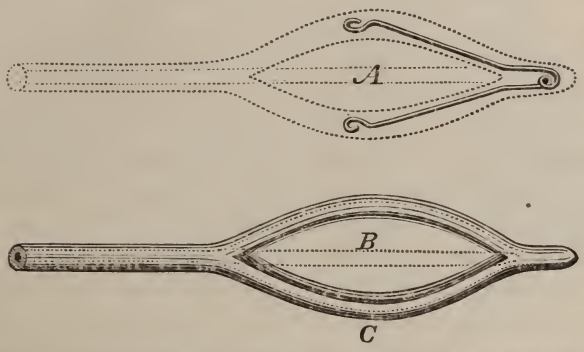
less likelihood of meeting with and wounding other contents of the belly. An examination *per vaginam* showed that the cul-de-sac was very much distended—so much so that the posterior vaginal wall was bulged into the vagina like a cystocele. In order to tap the cul-de-sac, we had made a trocar eight inches long. From its cutting end, for about three inches, it was given a slight curve, and over this curved part was fitted a suitable canula, through which, after being passed into the cul-de-sac, we proposed to introduce a drainage tube, which was to be held in position with rubber flanges. The first step of the operation was easily and very satisfactorily taken. The trocar passed directly into the cul-de-sac, and as soon as it was withdrawn there was a free flow of serum through the canula. The next step was not so easily taken, and we fully appreciated the imperfections of our instruments. The canula was in position, but beyond reach, except with our finger, while the tube was of soft rubber, very flexible, and had to be carried up to the canula with a pair of dressing forceps; and it was only after many failures that we succeeded in getting it through. At last, however, we had the satisfaction of seeing the fluid come through the tube—not in a large stream, it is true, but enough to have drained all of the fluid off in a few hours, and certainly enough for all practical purposes. Our next move was a very disasterous one, for in attempting to slip the canula out over the tube, we were awkward or unlucky enough to pull them both out; and while we had no trouble in re-introducing the canula, we tried patiently for a long time, but could not pass in the tube, and finally had to abandon the attempt until we could perfect our instruments.

The canula was short, far up, and very hard to get at. The rubber flanges also helped no little to make it difficult to get the tube through, and the pressure of the fluid further added to our embarrasment by driving the tube out several times after it was nearly through the canula. As a precaution, we confined the patient to her bed for several days, but at the end of that time, as she had only complained of a little soreness in her vagina, we allowed her to get up. It has now been two weeks or more since the experiment, and no

trouble seems likely to follow. For several days there was a little discharge of serum through the vagina, but, as we expected, the puncture soon closed and the discharge ceased.

Our experience only confirms us in our belief that the treatment can be carried out. As soon as the patient is inconvenienced by the re-accumulated fluid, we propose to try again and hope to demonstrate that it will lessen suffering and prolong life. A plug can be placed in the end of the tube outside of the vagina, and as often as necessary removed to drain off the fluid.

With the following changes in our instruments we hope to carry out the details of the operation with greater facility:



To secure better control over the canula, we will have attached to its shoulder a stiff wire, to be used as a handle. The canula being in position in the cul-de-sac, we will pass a speculum over the wire handle; and thus by bringing the vaginal opening of the canula into view, we expect to have less trouble in introducing the tube. Tubes with wire and rubber flanges have been tried, but in every instance, it was found that the flanges were either too limber and small to do good, or too stiff and large to go through the canula.

At last we have hit upon a modification which we think will serve a good purpose, not only in connection with the trouble under consideration, but in many cases in which a self-retaining drainage tube will do good, for example, in draining the bladder, pleural sac, and in pelvic abscesses.

Take a piece of steel wire, say two inches long; wind its

center several times around a probe; this will give us a spiral spring with two arms, which should be bent upon the spiral as shown in figure *A*. Split the vesical end of a soft gum or silk catheter and introduce the spiral spring into the split; the spiral portion of the spring should be pushed well up into the vesical end. The elasticity of the arms of the spring will spraddle open the splits and give us an instrument shown by figure *B*. By passing a stylet through the tube down to the vesical end by pulling the tube down on the stylet, the spraddled portion is made to shut up, when it can be introduced either through a canula or incision; but on withdrawing the stylet after the tube is in position the elasticity of the steel arms causes them to bulge open the split and form a shoulder which will prevent the tube from slipping out. Pressure upon the vesical end of the tube which would ordinarily tend to drive it out will cause the spring to act more powerfully and better secure the tube, while, by pulling upon the end outside of the vagina, the arms of the spring are brought together and the tube is easily removed.

With a piece of steel wire and a soft gum or silk catheter, any one can make the tube at a small outlay of time or money; but to those who prefer to have them made we will say that Geo. Tiemann & Co., 67 Chatham St., New York, have written us that they will adopt the principle and keep some of the tubes in stock.

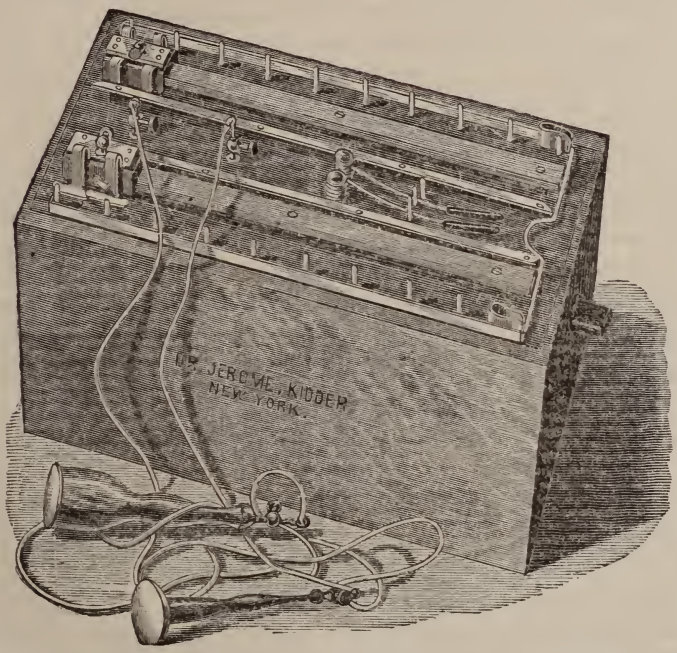
Point for Hypodermic Injections.

Dr. S. J. Bumstead, of Decauter, Ill., in the *Peoria Medical Monthly*, March, 1885, has adopted the back or the front of the shoulder towards the spine, rather than outwards towards the shoulder joint as the part least sensible to painful impressions. If the skin here is pinched for a moment before piercing it with the needle, the patient will often not feel the least pain or puncture.

A Hod Carrier having met with an accident, the town paper reports that "Dr. ——— was called in, but no disastrous results followed up to the time of our going to press."

ART. —.—**Some Interesting Reflex Neuroses, with Treatment and Comments.** By JOHN J. CALDWELL, M. D., Baltimore, Md.

Before reporting the subjoined cases, I wish to present the accompanying illustration of my favorite Farado-Galvanic Battery, with which most of my electrical treatments are



conducted. It combines many uses in one instrument. As its name indicates, it may be used to apply either the Faradic or the Galvanic current, or both currents at the same time.

CASE I.—*Reflex Paralysis with Epilepsy.*

Mrs. Emily Jane P——, aged 50 years; her father and mother reached advanced age, and were free from acquired or hereditary taint. She was married at the age of 26, and has given birth to three healthy children—two living, one deceased. She enjoyed uninterrupted health until she attained her 48th year, when she manifested some of the malaise incident to the "change of life."

About the time of her anticipated period, it became necessary for her to bail out the flooded cellar of her residence.

The result of the unusual fatigue, exposure, and submergence of her feet, was the sudden reflex arrest of the catamenial flow. She retired at 11 o'clock that night, reposing quietly until 1 A. M., when she arose from her couch to administer to the wants of her son. Immediately after her return to bed, she was seized with violent epileptic convulsions, which returned at short intervals until about 6 A. M. Upon restoration to consciousness, she discovered that her right arm was paralyzed. About the time of her regular courses there was a recurrence of the epileptic fits, which were repeated at every monthly period for about nine months, when she was referred to me for treatment. On the return of the third catamenial period, after her first paralytic attack, she was again seized with paralysis, which then attacked her in the left arm. The menses in each case were scanty and painful. Her medical attendant, according to her statement, pronounced her seizures as apoplexies; but it was manifest, from their number and character, and the state of stupor and listlessness in which they left her, that she was suffering from epilepsy, attended with reflex paralysis, due to congestion and hyperplasia of the uretus and its appendages.

Upon my first examination, I found that there was complete paralysis of motion and partial loss of sensation of the upper extremities—no voluntary movements of arm, hand or shoulder being possible. Pricking and pinching of the skin were very slightly felt. Faradization was resorted to with little or no effect, but the continuous current produced gentle contractions of the muscles, with some degree of sensation and pain. Even to accomplish this result, twenty-two cells (Stohrer) were required. After a few applications of the continuous current, we found the Faradic current produced good contractions and sensations. Coincidentally, we administered liberal doses of bromo-iodide of potash in milk three times a day, with atropia sulphate at bed-time. In all, the patient has been under my treatment about two months, and has received thirty applications of the different currents, and has taken from seventy to ninety grains of the bromide mixture per day. In the above period of two months she has had but one seizure, and the use of her right arm and hand is now almost perfect, with a decided improvement in the left, and with recovery still progressing, from the periphery towards the centre—the fingers being the first to regain their normal functions.

Commentary.—What was the actual seat and nature of the paralyzing lesion in this case? *Reflex*—not cerebral?

No, I should think not, because cerebral paralysis usually affects one side of the body, the face and the leg as well as the arm; but in this case the cerebral nerves and the lower extremities did not at all suffer. This speaks strongly against the cerebral origin of the patient's palsy. And again, in cerebral paralysis, whatever may be the extent of the loss of power, the nerves and muscles always retain their excitability to Faradization. The absence of this excitability induces us to reject the idea that the brain was the seat of the paralysis.

Is it not a case of *spinal paralysis?* Not in my opinion; for if there had been disease of the upper portion of the cord, or its meninges sufficiently severe to cause paralysis of motion and sensation of the whole upper extremities, the intercostal muscles and the diaphragm and the lower extremities would have participated in the affection.

After excluding all the various affections which we have considered, we are led to the conclusion that the disease must have been due to some pathological lesion of the uterus and its appendages, resulting from the exposure already referred to, producing *reflex paralysis, resulting from genital irritation.*

CASE II.—*Reflex Paralysis, due to an Adherent Foreskin.*

Little Robie, was brought to my office a few months since, accompanied by his parents and physician, suffering from irritation of the glans penis. His mother informed me that for a few preceding months he had been extremely nervous, frequently falling on the floor and continually pulling at his privates, and had lost the power of lingual articulation. His age at the time was between six and seven years. His physical condition was otherwise good, and his muscular development most excellent.

The plan of operation in his case was to roll back the prepuce and break up the adhesions, and dress the abrasion with lint and water—the result being a perfect restoration of his functions.

The existence of reflex paralysis has often been questioned by many of the best observers, who have attributed the phenomena to some unknown disease of the spinal cord, which may have escaped the examination by the naked eye, or by the microscope, and neglected by the electrical tests. Never-

theless we believe that after duly weighing everything that may be said against this form of palsy, there still will be found cases which may be fairly claimed as belonging to this class. We find the physiological basis of this view in the facts wich have been lately discovered concerning the inhibitory system of nerves, by experiments which have demonstrated clearly that we may temporarily suppress the functions of the cord by producing irritation upon certain peripheral nerves.

Case III.—*Reflex Tetanic Symptoms.*

Mary G——, a servant girl, aged 24, had her finger caught in a stove-grate, crushing it badly. I was called to see her on the evening of the same day, and found her suffering from reflex paralysis of the lower portion of the body, with tetanic convulsions of the face and neck. We would simply remark that the use of anodynes with chloroform produced very salutary effects.

In rabbits, in which the kidneys, womb or intestinal mucous membrane are squeezed, sudden paralysis of the hind legs ensue, with abolishment of reflex excitability, and as soon as the pressure is relaxed, the paralysis disappears. With regard to the pathology, we find cases on record where the sudden recovery of function, after the removal of peripheral irritation, leaves no doubt of the nature of the disease.

Reflex Paraplegia and Paresis.

Landry describes a case of paraplegia from the flexion of the womb, and when the flexion was remedied, the palsy disappeared. And again, Rosenthal has seen a case of peresis of both lower extremities, which disappeared on a needle being extracted from the vagina. Althaus gives us a number of cases illustrative of this form of reflex paralysis.

The Causes of Reflex Paralysis.

We may note, among the causes of reflex paralysis, paralysis arising during disease of the genito-urinary organs; those paralyses which occur during or just after dysenteries, diarrhœas, super-purgations, or in connection with worms; such as arise during or after pneumonia or pleurisy; such as are seemingly brought on by dentition, diphtheria, fevers,

and eruptive diseases; such as seem to be occasioned by cold, or by cold and moisture, as illustrated in Case I; such as are due to external injuries, or result from certain drugs; paralyses due to great emotional disturbances, etc.

CASE IV.—*Reflex Infantile Paralysis.*

A child, aged two and a half years. There was complete paralysis of both lower extremities, with a tendency to double talipes-varus, with partial loss of sensation and a lowering of the temperature; there was also partial atrophy of the affected parts. During dentition a slight convulsion occurred, which was followed for several days by coma and paralysis. Galvanism was applied on alternate days for periods of fifteen minutes. The result was very flattering. From a paralyzed state the patient was able to stand alone and soon to walk around the room. Recovery.

CASE V.—*Psychosis of Anterior Convolutions—with Paraplegia.*

Mr. C——, aged fifty-five years, suffering from hemiplegia of the right side. Eighteen months previous to my seeing him he was suddenly prostrated. After rest and treatment he suffered a second attack. On examinrtion, I found his arm and leg partially paralyzed; speech much impeded; deglutition somewhat impaired; sensation of both sides normal; nutrition preserved; muscular tonicity and contractility also preserved. In this case there seemed to be a lesion of the anterior convolutions, causing partial aphasia from loss of coördination. Digestion continued good, and he slept well. Regarding this condition as due to a local trouble, I directed my treatment accordingly. Gentle applications of constant galvanic currents were made to the brain and sympathetic nerve, and a course of general medication by iron, strychnine and phosphorus in small doses was directed. This treatment was continued for four months. As results, when not excited the patient is able to articulate quite distinctly for five or ten minutes at a time; able to convey food to the mouth with his right hand; write a few words; and stand alone.

CASE VI.—*Migraine,*

Mrs. B——, aged 35; has six children. She has suffered from migraine periodically for twenty years, at intervals of ten days or two weeks—the neuralgic pain being confined to the right side of the head. This affection was due to reflex irritation of the stomach and bowels. She tried in vain

many remedies from several physicians. She applied at my office a year ago. After due examination, I diagnosed her trouble as above stated, and placed her upon a better hygiene, with carefully selected diet and more rest, and ordered Parke, Davis & Co.'s nitro-glycerine pills, $\frac{1}{50}$th of grain each, one three times a day, with the direction on the approach of an attack to resume the recumbent position, and take one of the pills every half hour until relief was obtained. After she had taken this remedy for ten days, I ordered her two pills three times a day, and then in ten days more three pills, and so continued to increase in the same ratio until she had taken five pills three times a day. This she continued for several months, with the best results—she suffering only two severe attacks, which were induced by great mental depression from affliction and anxiety. Since then she has gradually diminished the number of pills, until now she only takes this medicine occasionally—her trouble being permanently relieved. The nitro-glycerine has had the effect to strengthen her digestion and to regulate her bowels, and to relieve her melancholy.

Commentary.—The above report relates to the history of a lady in comfortable circumstances, plethoric in habit, of neurotic temperament, subject to explosions of neuralgic headache, followed by temporary melancholy, of many years standing, successfully relieved by this new drug—nitro-glycerine.

Case VII.—*Angina Pectoris.*

Mr. B——, aged 70, father of the above-named lady. He also was of plethoric habit, with neurotic tendencies. For years he had suffered with some neurosis of the bowels, ending in periodic explosions, which were relieved by moderate attacks of diarrhœa. This condition of things had existed with him for years. Small doses of arsenic and warm spring baths had given him great relief. Latterly he has suffered angina pectoris of a reflex origin, due to imperfect mastication and indigestion. A few months ago he applied to this office for relief, because of an aggravated attack of angina. His seizures were as frequent as three or four times in the twenty-four hours.

I found his skin cold and clammy, his heart weak and rapid, and his bowels greatly distended from fermentation. I ordered him to his room for rest in a recumbent position, and a diet of milk and lime-water, and prescribed nitro-

glycerine, as in his daughter's case, every half hour until the acute symptoms had subsided. The seizures were immediately arrested, and the collateral symptoms continued to improve. Several weeks later, and during the hot weather, it was deemed proper to send him to the Warm Springs, in Virginia, under restricted diet, principally of milk and beef-tea. In the Fall he returned, greatly improved for a man of his years, and resumed the care of his business. His father had suffered in like manner, and died suddenly in his chair after a hearty meal.

Commentary.—Evidently this is a family of neurotic tendencies—the grandfather, the father and child suffering from neurosis of a reflex character, with a disposition to sudden and fatal terminations. It is a blessing that the later marches of therapeutics are able to afford remedies equal to the emergencies, viz: nitro-glycerine, amyl-nitrite, chloroform, and galvanism. Their successful administration is greatly enhanced by the later advances in the science of pathology and therapeutics.

Case VIII.—*Epilepsy* (*Petit Mal*).

C——, a dairyman, aged 22, suffering from epilepsy (petit mal), frequent attacks of partial loss of consciousness which rendered him unfit to follow his trade. When referred to me I found him pale, thin and melancholic, suffering from insomnia and fearful forebodings, with frequent epileptoid attacks. Upon recovering his senses he would be dull, listless, and there was temporary loss of mental coördination. Upon inquiry, I diagnosed reflex neurosis from excessive irritation of the genital organs. He confessed masturbation. The penis was cold and flabby with vascular dilatation. The prostate portion of the urethra was spastic and irritable, with abundant prostatic discharge, which wept away incontinently. This condition of things had existed for months. This irritation produced explosions—epileptic in character. It was then he was referred to me for treatment. After paying the usual attention to a better hygiene and diet, I ordered him at bed time to take a drachm of bromide of sodium and $\frac{1}{60}$th of a grain of atropia sulphate in solution, and during the day Parke, Davis & Co.'s nitro-glycerine pills—$\frac{1}{50}$th grain each—three times a day. He was also to use hot sponge baths for the lower portion of the spine at bed time. The urethra was to be gradually dilated with steel sounds. This treatment was continued for several months with the very

best results. The petit mals have entirely disappeared with great improvement of bodily and mental health. He is now a conductor on one of our city car lines. After the sedative treatment had done its good part by removing local and general irritation, he was placed upon a tonic treatment consisting of the tincture of belladonna, nux vomica and cinchona before meals, good hours and moral and mental hygiene.

CASE IX.—*Reflex Epilepsy.*

Mr. F., aged 55, robust and of a healthy appearance, a well known horse dealer, a man of remarkable nerve power and good business habits, rather a free liver, figure rotund, weighing about 180 pounds. A few years ago he suffered reverses of fortune, which caused him such anxiety and mental worry as to induce epilepsy (grand mal), though the attacks were not very frequent—about once a week. The prodromata afforded him sufficient warning to select a proper place to lie down and thus save him from immediate danger. It was during one of the explosions that I was sent for. I found the seizure quite severe, having to wait an hour before I could rouse him from his subsequent stupor. Believing the reflex trouble to be some irritation of the sympathetic—of the solar plexus—I ordered for him a brisk mercurial cathartic at night, following it up in the morning by a saline draught. I then placed him upon the bromide with atropine at bed time and nitro-glycerine during the day, every three hours. This, with proper hygiene and a milk diet of several months' duration, has resulted, I believe, in complete recovery.

COMMENTARY.—In cases of epilepsy due to functional derangement, where there are no permanent lesions, secondary changes or morbid growths, I believe the combination of atropine with the bromides administered at bed time almost a specific. (I name this time of administration because during sleep the physiological effects of atropine—dilated pupils, giddy sensations, etc.—will not inconvenience the patient during sleep, and will have passed off by morning.) The nitro-glycerine will coördinate the nerve centres during the day. Most of his epileptic and epileptiform troubles originate from gastric and enteric irritations, thus showing the lesion or disturbances to be greatly confined to the sympathetic and pneumogastric centres.

There is no one remedy that so specially and manifestly addresses itself, in my opinion, to these trophic centres, as

atropine, and the same may be said of nitro-glycerine, in its exhibition in the manifold disturbances due to hyperæmia or anæmia of the brain centres. The bromides may be considered the great coördinators and supporters of peripheral disturbances. Thus, in the three remedies, we have a combination physiologically and theoretically indicated in the coördination of the entire nervous system—a system that may be considered a unit, still subject to local and special actions, as many remedies have shown and will indicate.

The foregoing, with many other cases that could be mentioned, are practical illustrations of the proof of the above theory and the benefits of the combination of the three drugs in the treatment of these epileptic cases. In many cases I might mention from experience, reports, etc., where bromides, alone or in other combinations, have had a great effect in the suppression or control of epilepsy, they yet do not afford, in my opinion, the brilliant results obtained from the bromides combined with atropine, followed up by the nitro-glycerine treatment.

In this connection, I may say that many of the manifestations of persistent spermatorrhœa have borne a close analogy to the behavior of epilepsy and epileptoids, particularly as to their periodicity, incubation and explosive tendencies, as well as the nervous phenomena, such as pallor, melancholy and stubborn resistance to all ordinary treatment and the kindly manner in which they yield to the above epileptic treatment, galvanism and other neurotic remedies, as the report of the following cases will indicate.

Case X.—*Persistent Spermatorrhœa.*

Mr. H., of North Carolina, aged 30, married several years without issue owing to his persistent spermatorrhœa, which incapacitated the full act of copulation and deteriorated the vitality of his semen. Upon presentation I found that his urethra along the whole canal was very irritable—particularly so along the prostatic portion; that the organ was continually weeping spermatic and prostatic fluids, and that he suffered ejection during the slightest irritation—mentally or physically—and that he was melancholy and foreboding, and that his skin was cold, clammy and sallow. His general health was very much broken. He had married with the

hope of benefitting these unhappy symptoms, but this was a great mistake—one that is made by many laboring under like conditions. Instead of marriage, such parties should seek as a remedy the advice and treatment of the intelligent, scientific physician—one honest and reliable, making these cases a special study. Unfortunately for the community, the advertising quacks have had the majority of these delicate and all-important cases as their greatest source of revenue.

Upon passing the sound, I found the urethra very tender, with a spasmodic stricture located at or near the prostatic gland. The passage of the sound was continued twice a week to dilate the urethra and to lessen its irritability. During the emission of semen, and just previous to that act, he observed a peculiar sensation or warning similar to the aura of epilepsy. Hence I placed him upon the bromides and atropine at night, and administered the nitro-glycerine pills (Parke, Davis & Co.'s, $\frac{1}{50}$th grain each)—one three times a day—and ordered warm baths and careful diet. The effect of this treatment was to arrest his trouble and gradually to restore him to physical and mental health. After this treatment had been continued for several months, I placed him upon tonic treatment, consisting of the fluid extract of damiana, belladonna, nux vomica and tincture of cinchona compound with occasional applications of electricity to the spine. This, together with a select diet, added greatly to his vigor and procreative powers. All unnatural discharges have long since ceased, with a fair promise of being blessed with offspring—his wife being several months advanced in pregnancy.

The number of such cases throughout the land is legion, and ever will be until our communities are taught to value scientific and special treatment.

Case XI.—*Neurasthenia.*

Mr. D——, a young gentleman aged 25, a student at law, who also performed the duties of a clerk in an office controling a large practice. His studies and duties proved too arduous an undertaking, and soon broke him down mentally and physically—being of a nervous and ambitious disposition. He suffered greatly from nervous dyspepsia and general nervous exhauston or neurasthenia. He lost flesh, lost sleep, and was tremulous and depressed, and suffered frequent seminal losses night and day. Upon examining the urethra, it was found to be irritable, with a continuous weeping discharge. No stricture was found. The penis was small,

flabby and cold. I ordered him a vacation and administered atropine with bromides until the nervous irritation had subsided. I then gave a tonic consisting of belladonna, nux vomica and tincture of cinchona during the day, with doses of colocynth and hyoscyamus at bed time, as required, making applications of the Faradic current locally and generally every few days. This treatment was kept up during the summer vacation until late in the fall, when he returned to his vocation, generally better and greatly restored in his nervous system. He sleeps better, his appetite is good, and his genital functions are normal. He is under the use of electricity, with the caution and advice to be more moderate in all things.

CASE XII.—*Neurosis of Genitalia with Nervous Paralysis.*

Mr. H——, a State official of Pennsylvania, aged 28, lives in comfortable circumstances. He was referred to me because of suffering from general nervous prostration. He is tall, athletic and active; he had lately lost his color and vivacity, and had acquired an unaccountable dread of persons and places. He was almost a monomaniac in the fear of on-coming "loss-of-manhood" or paralysis of his procreative powers. Upon examination I found it was his custom to endure prolonged and arduous mental work, neglecting the regularity of sleep, diet and recreation. He had a fine constitution and physical development. His genito-urinary organs were intact and well developed, which proved readily amenable to treatment by proper hygiene, occasional administrations of electricity and a tonic consisting of damiana and tincture of cocoa—equal parts—administered before meals and at bed time. A few months of such treatment fully restored him in every particular. His physician deemed his mental phenomena of an abnormal and perhaps dangerous character; hence he referred him to me. All his unpleasant symptoms passed away *para passu* as he gradually improved, though such a case neglected long enough undoubtedly might have ended in some permanent physiological lesion.

CASE XIII.—*Impotency Due to Excessive Use of Tobacco.*

Mr. M——, aged 30, married, of our city, was referred to me one year ago as a case of impotency. I found him a hale, hearty man, well developed mentally and physically. His muscles were hard and elastic, and he was a great walker. He hardly knew what it was to suffer fatigue. All of his organs were well developed—especially those of the genito-urinary organs. After a thorough inquiry, I found he was

excessive in the use of tobacco, chewing and smoking to an alarming extent, and at times was in the habit of using alcoholic spirits too freely—all of which I forbade. I ordered for him a moderate diet and pills of damiana and nux vomica; also the daily application of the Faradic stimulus to the cord and genito-urinary appendages. He was to abstain from all genital exercises. He continued under treatment for several months with most excellent results.

Tobacco and whiskey in excess are, in my opinion, a frequent and a potent inhibitor of the sexual act.

CASE XIV.—*Inertia of the Uterus Successfully Treated with Damiana.*

A young married lady, aged 20 years, from a fright or shock, suffered abortion during her first pregnancy. After this her menses were scant and irregular, with failing health for several years. She did not become pregnant during this time. She and her husband were anxious for an heir, as an estate depended on the issue, aside from the natural desire of maternity. After careful examination, I diagnosed a neurasthenic condition with consequent inertia of the genito-urinary organs. I ordered generous diet and hygiene, gentle exercise, and I administered fluid extract of damiana (Parke, Davis & Co.'s) three or four times daily, commencing with small doses and gradually increasing. After a few months the menses became more regular and pronounced. With general improvement of health and spirits, at the end of the third month of treatment she became *enciente*, and went through a regular term with a happy delivery.

This is cited as a typical case of many others that could be reported, where damiana acted an admirable part in the irregularities of woman.

CASE XV.—*Case of Impotency Successfully Treated with Damiana.*

A gentleman, aged 30 years, of delicate frame and appearance, constantly complained of feeble digestion, irregular bowels and constipation. His complexion is sallow; he sleeps badly; his habits are sedentary, and is given greatly to literature—frequently delivering public readings, etc. He has been married several years without issue. His wife is buxom, active and regular. Upon examination, I found his organs rather small, with the power of incomplete erection only. His semen under the glass exhibited but few evidences of life and vigor. I ordered a more active life, less

study, regular hours and diet. I placed him on Parke, Davis & Co.'s fluid extract of damiana. After six months of careful management, he was greatly restored. He reports his wife in a fair way to become a mother.

COMMENTARY.—In cases of impotence from masturbation, accompanied with spermatorrhœa, we find morbid changes in the vesicular seminales, ejaculatory ducts, bulbous portion of the urethra and prostatic gland. Such cases frequently require surgical and special treatment, but I have found much advantage to result from the use of electricity and the free use of damiana. These agents possess tonic power over the nervous apparatus generally, and they act most favorably upon the nerve centres presiding over the functions of the genito-urinary organs.

Clinical Reports.

Case of Puerperal Septicæmia, with Remarks on Prophylaxis and Treatment. By I. S. STONE, M. D., Lincoln, Va.

Mrs. M., æt. 23, primipara, after a normal labor of eight hours duration was delivered of a healthy female child weighing eight pounds. Presentation, left occipito-iliac. The perineum was not lacerated; the vagina sustained no injury, but the cervix uteri sustained a double transverse laceration of two-thirds of its vaginal portion. No hæmorrhage followed delivery. The placenta was easily removed from the vagina and was not torn. A tepid vaginal injection of hydrargyr. bichlorid. solution of the strength of 1 to 500 parts of water was administered a few hours after the termination of labor. Every precaution was taken to secure perfect comfort and care of this patient. A slight increase of temperature is shown in the chart the day of labor ten hours afterwards. On the day following, the temperature continued to rise and slight chilliness was felt by the patient.

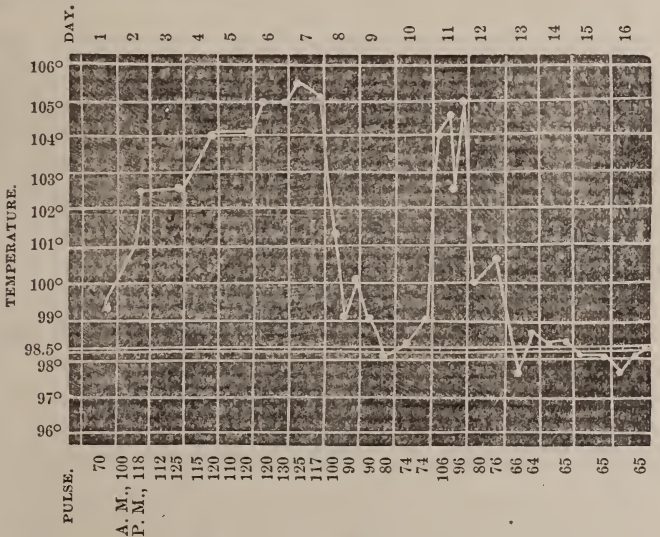
As we are told by our best authorities that milk fever is a misnomer and really is a form of septicæmia, I determined in this case to ascertain the cause of increased temperature, etc. I did not undertake a careful examination into the results of labor, *i. e.*, the effect upon the cervix. Following

the routine plan of merely using the finger in making the examination, I was satisfied that no more than the usual laceration of a first labor existed. After carefully washing out the vaginal canal every twelve hours with the bichloride solution, and giving quinine in large doses, I found that my patient was growing rapidly worse, and notwithstanding the precautions taken, she was in great danger.

On the seventh day of the puerperium and sixth of fever, while the thermometer indicated a temperature of 105.6°, the patient deeply cinchonized and decidedly delirious, I gave the uterus a thorough washing out with the solution already mentioned. In six hours I repeated the same. In the meantime the temperature had fallen slightly. I ordered cold compresses to the abdomen and morphia *pro re nata*. In eighteen hours the temperature had fallen to 101°, and the pulse greatly improved. After the temperature had nearly reached the health point, I discontinued the uterine injections and the case progressed favorably for three days. After this period of time had elapsed the rigors recommenced and the symptoms again assumed a grave character. After a reduction of temperature of 6° F. in twenty-four hours, I thought the patient would surely continue to improve. The temperature was again rapidly reduced, as will be seen by reference to the chart. After this relapse, I continued the uterine injection at first every twelve hours, then every twenty-four for nearly a week, since which time the patient has continued to improve. The cervix remains to be repaired, which will be done after the process of involution is accomplished. I should mention that iodoform was freely applied to the torn cervix, which had become completely invested with the well-known diphtheritic membrane. For want of a better instrument I used an English catheter, first cutting off the eyelet, and attaching a rubber tube to this and connected with the small point of a Davidson syringe. After dipping this catheter in hot water it becomes soft and yet firm enough to be readily introduced into the uterus up to the fundus. I like the plan of using a Howard bi-valve speculum and of forming a pool of the antiseptic solution around the cervix. After expelling all the air from the syringe and tube (which is done by holding the catheter or tube under the surface of the antiseptic pool while the bulb of the syringe is being worked) the introduction is safe and easy. The first size tube was No. 10. Afterward a No. 6 was found necessary. The effect of quinine in this case was far from satisfactory. It failed to reduce the temperature,

and was not used during the relapse. Likewise the antiseptic wash failed to prevent septic disease. But when applied to the uterine cavity its effect was specific. After a few days use of the bichloride solution it was necessary to discontinue its use in the vaginal canal owing to the great irritation produced. I substituted carbolic acid for it and used the cylindrical speculum. A slight diarrhœa, with much tenesmus, demanded morphia and iodoform suppositories for its relief. These remedies acted nicely. Some surgeons are still opposed to the use of the so-called germicides, and hold their beneficial influence in question. The use of pure hot water for the purpose of uterine irrigation may yet prove as beneficial as the treatment above described. Who will experiment with it? In this case, after the uterine injections were commenced, I had the assistance of my most skillful nurses, without whose aid it would have been necessary to have had a physician constantly at the bedside. The catheter was required for many days, and in many ways the trained nurse was of great service, while the ordinary nurse would have been of but little value.

We append the daily temperature chart showing reduction of temperature after using uterine injections in the case of puerperal septicæmia.



Prophylaxis and Treatment.

In looking over the literature of immediate repair of the cervix I do not find that positive necessity urged, as in the

cases of ruptured perineum. Lusk (*Midwifery*, 1882,) fails to express an opinion. Other works of earlier date do not furnish much information. It is reserved for the medical journals to enlighten us on this point. Dr. Pallen, in the *Richmond and Louisville Medical Journal*, Vol. XVII, has furnished a masterly article. Alloway, of Montreal (*American Journal of Obstetrics*, January, 1884), gives an article on early closure of lacerated perineum, in which he cites with commendable criticism the usual care of the puerperal patient, as conducted by the modest, easy-going physician. In this paper reference is made to the early closure of the lacerated cervix. Dr. W. T. Howard, of Baltimore, in the *Transactions of the Medico-Chirurgical Society of Maryland*, 1883, also gives advice far in advance of most literature in the hands of physicians, and indeed rarely found in even recent text-books. It is impossible to allude in the present article to the various papers to be found in medical literature of the past few years.

In reference to uterine injections as a means of preventing puerperal septicæmia, the best authorities are united positively in condemning uterine irrigation, unless symptoms of septicæmia can be traced unmistakably to that organ. In a vast majority of cases lesions of the vaginal canal constitute the point of septic absorption. Lusk (page 643 op. cit.) says, "Intra-uterine injections should be resorted to with extreme circumspection. Unless the infection, which is more rarely the case, proceeds from the uterine cavity, they are unnecessary." After alluding to a host of eminent authorities favoring intra-uterine injections, he mentions C. Braun as opposing. "We must protest against injections made by physicians into the uterine cavity. Such meddlesomeness is more likely to do harm than good." To this opinion Lusk adds his endorsement thus: "Having seen much harm done in his hospital service by the house staff," etc. Prof. Thomas, in his paper read before the New York Academy of Medicine, has inaugurated a new era in the prophylaxis and treatment of puerperal septicæmia. Out of all this diversity of opinion, how are we in private practice to pursue a safe, conservative course? One that is sensible and adapted to

the resources of the average patient, and may I say average physician ?

In addition to the usual rules laid down, the following appear at least judicious:

1st. To allow full time for dilatation of the os. Meddlesome midwifery is bad.

2d. After the birth of the child, cleanse the patient thoroughly and, if possible, remove her to another bed.

3rd. No antiseptic precautions are necessary in a normal labor in a rural community when the attending physician is not attending cases of infectious disease; obversely antiseptic precautions are positively demanded. Thorough cleanliness is always demanded.

4th. A thorough examination should be made immediately after delivery, using the speculum if necessary, and any tear of the cervix or vaginal canal should be at once closed with silk sutures (antiseptic) if perineum is not ruptured; if perineum is torn, carbolized catgut or silk should be used in the perineum. One suture is generally sufficient for the ruptured perineum.

5th. If the attending physician has the assistance of a suitable nurse, it is not expedient to visit the patient frequently, as the germs of disease may be thus carried to the patient.

6th. If uterine irrigation is demanded the bichloride of mercury solution (1 part of the bichloride to 1000, 2000 or 3000 parts of water, according to emergency) should be used. A temperature of 100° F. is always to be recognized as a threatening sign or symptom. The only assistant required is a competent nurse. If any symptoms of the toxic effect of the antiseptic solution should present themselves, the antiseptic must be immediately changed.

Case of Rupture of the Fundus Uteri in Labor—Heart-Burn a Prominent Symptom. By J. GRAMMER, M. D., Halifax C. H., Va.

In the November number, 1884, of the *Medical Monthly*, I reported a case of simulated labor, in which for a short while I was very much afraid that a rupture of the fundus uteri

had occurred. I have now to report an actual occurrence of that accident, which I did not fully realize until too late. Under the circumstances, I take no blame to myself for not recognizing it. But a history of the case, I think, will prove instructive, and others may profit by my pardonable mistake. Our mistakes ought to teach us more than our successes, if only by shaming us into harder study, and greater efforts, and more careful diagnoses.

Jan. 27th, 1885, I was sent for about 9 P. M. to see Caroline R——, a colored woman, age 35 years, with nine children. On reaching her, about 10 P. M., I learned that she had been in labor about twenty-four hours, that the pains had been very weak and slow, that the waters had dribbled away, that the head had been in, or at the lower strait, that about 4 or 5 o'clock she had become almost wild with fatigue and impatience, and had used all the voluntary effort that she could command in straining and bearing down, but without any apparent result in the descent of the head. At length the attendant, a tolerably intelligent white woman, though not a professed midwife, found that the head had receded, and the woman was complaining of pain in the epigastrium, great thirst, and severe "heart-burn." Of course the indications pointed to rupture of the uterine wall. It had been about five hours since the cessation of labor pains, and the recession of the head; but the pulse was tolerably full and soft, and not over 100; the temperature was normal, and the skin soft and moist, without perspiration, and the patient was calm and comfortable, except for the heart-burn (which she described as reaching up the whole throat), and the soreness and dull pain at the stomach. The abdomen was so sore that she would not let me palpate it, and on a vaginal examination I found the head of the fœtus in the first position, in the superior strait. The sound of the fœtal heart was perfectly distinct, and 128. The day that the labor commenced, she had been washing hard up to the time of the first pains. When I entered the house, she was sitting propped up in bed, eating bread and butter and coffee, and expressed herself as refreshed by it.

With these data to go upon, I came to the conclusion that perhaps the labor was slightly premature, and that the womb was resting for a while to renew its strength. I gave her twenty grains chloral hydrate and ten grains of potassium bromide, which put her to sleep for about two hours. She awoke in about the same condition, and asked for and drank

a cup of coffee. I then gave her another dose of chloral and potassium bromide, and left some to be given her whenever she should need it, until the pains showed signs of returning.

Jan. 28th. I saw her again about 10 A. M., in nearly the same condition as when I left her. She had slept pretty well during the night and morning, had taken some food, and had passed water and fæces once. Pulse 108, but without any signs of failure. The head was in the same place and position, and she was still complaining of heart-burn and pain in the stomach, but there was no nausea nor vomiting. Being in a hurry, I failed to listen for the fœtal heart, and left directions to wait for nature to revive the labor and bring on the pains.

I saw her again about 7 P. M. After resting tolerably well during the day, and eating some dinner, she was taken suddenly about 5 P. M. with a pain which she described as "something slipping loose in her belly," followed by a profuse hæmorrhage, which continued—but without any more pain—for about an hour, with more or less profuseness. I saw at once the signs of collapse, though the woman was calm and collected, and complained bitterly of the heart-burn, saying that her whole throat felt as if it were burning up. The pulse was almost indistinguishable. The head had entirely disappeared. I introduced my hand into the vagina, and succeeded in getting my forefinger about half its length into the tightly contracted uterus. The place of the rupture was inaccessible, but I knew then rupture had occurred, and that the womb had contracted upon the head and the placenta, holding the head fast in the superior strait, and preventing the placenta from bleeding and enabling it to continue the supply of blood to the fœtal heart.

At my first visit, which was at least five hours after the accident had occurred, I reasoned as follows, as to the diagnosis: Reasons for rupture of the uterus—(1) Recession of the head; (2) Cessation of labor pains; (3) Pain in the epigastrium and tenderness of abdominal walls, preventing my feeling the child's body and limbs. On the other hand, if recession of the head were due to rupture, would the head remain so long (five hours) easily accessible? In a roomy pelvis, would not a flaccid and worn-out uterus, in which the pains had ceased, allow that much recession? Could rupture occur without there being some show of hæmorrhage? Could the feeble and inefficient pains that have been de-

scribed accomplish so difficult and unusual a result, especially when the outlet is a wide, free and well beaten track? Could rupture have existed so long without producing more constitutional disturbances? Could the child live five hours or more in the abdominal cavity, and its heart be heard exactly in the locality where it ought to be? May not the slow, weak pains, and the several hours at the washing tub, indicate that the labor was premature, and the exhausted womb was resting for renewed strength?—a not unusual thing, even at full term, and with normal vigor in the early uterine contractions. The abdominal tenderness, pain in the epigastrium, and heartburn, may be due to other causes; but the heartburn, as far as my knowledge goes, is something new in such cases, and though she said she had sometimes suffered slightly from it, it was her chief and most distressing complaint.

At my second visit, sixteen or eighteen hours after the rupture, I almost dismissed the thought of a rupture of the uterus, and though I thought that it was waiting rather long to renew its labors, the apparent condition of the woman was so good that I can hardly say that I felt much uneasiness. I am very sorry that I neglected, on that occasion, to auscult the fœtal heart.

The strangest thing about this case is that the head should have been retained in the womb so long, and that collapse should have been so long deferred—about thirty hours. When it did come it came rapidly, and the patient died within half an hour after I examined her, very suddenly and easily. With the light of subsequent developments, I can see wherein I was wrong, what I omitted to investigate, and what I ought to have done; but I think there are very few, even of those who have had much experience in such cases, who would not have come to the same conclusion that I did. I have examined all my authors since, and find in most of them that collapse is very rarely deferred longer than twelve hours.

Proceedings of Societies, Boards, etc.

AMERICAN SURGICAL ASSOCIATION.

FIRST DAY—MORNING—*April* 25th, 1885.

The Sixth Annual Session convened in Washington D. C., at 11 A. M., and was called to order by the President, Dr. Wm. T. Briggs, of Nashville, Tenn., who delivered the

PRESIDENT'S ADDRESS.

After paying a eulogy upon the life-work of the late Dr. S. D. Gross, he suggested some changes as to the organization of the Association which he thought needed. He objected to the law which limited the number of members, and proposed that the door for membership be open to all reputable surgeons. The Association should do away with the unenviable reputation it has gained of being a close corporation. He favored the holding of the annual meetings in August or September, when surgeons can better attend such meetings as this, than in the Spring. Besides it interfered more or less with the attendance upon the American Medical Association—the two meetings under the present system, being held at about the same time and in different localities. He recommended the enrollment of a selected few foreign surgeons as honorary fellows. The Address was referred to the Council for consideration and report.

Dr. David Prince, of Jacksonville, Ill., described a

Device for the Purification of the Air of Rooms used for Operations.

In brief, the plan consists in infiltrating the air which is to enter the operating room with steam spray, which is to be filtered through muslin sieves as it passes from the purifying room into the upper part of the operating room. He thus recommends three filtrations of the air—one by steam and two by water. The exit ventilation is to be through muslin set in frames in the window freest from the pressure of wind on the outside. Make the floor, the ceilings and all the articles of furniture, etc., that are necessary in the room non-absorbable with wax, paraffin, tarred paper, paint, etc. Avoid having closets in the room, and let there be six or more feet of space between the door of entrance and the nearest wall of the main building of the hospital. Before an operation involving the opening of a joint or the belly, fumigate the rooms above and below the operating room by burning sulphur in the basement so as to destroy any possible floating

organic material. The steam sprays (already referred to as entering the room) precipitate or absorb the fumes of sulphur so as to leave a comfortable operating room. It is calculated that enough of air will enter and escape to change the whole volume of air in the room about once in fifteen minutes. Antiseptics may also be employed on the wounds so as not to omit any useful precaution. Cleanse the hands and finger nails with one or another antiseptic solution, applied with a brush. Disinfect also the instruments and dressings with carbolized water, etc., so as to destroy any microbes. "A useful precaution on the part of the operator may be a bath and a change of clothing, the hair and head being dampened so that dust will not escape from them." The wearing of gowns will oblige all dust escaping from the operator and his assistants to fall to the floor, whence it may escape with the draught which carries out the lowest stratum of air.

During the *afternoon session*, Dr. John B. Roberts, of Philadelphia, Pa., read a paper on the

Field and Limitation of the Operative Surgery of the Human Brain.

The following nine conclusions, he said, embodied his creed on the subject of traumatic injuries of the brain.

1. The complexus of symptoms called "compression of the brain," is not due so much to displacing pressure exerted on the brain-substance as it is to some form or degree of intra-cranial inflammation. Let the profession repudiate the idea that displacement of brain-substance is the cause of the trouble, and they will then discard many of the erroneous theories in regard to the use of the trephine. There are no definite symptoms by which we can distinguish between an inflammation from laceration and compression of the brain-substance. It would be well if the expression, "traumatic compression of the brain," were always translated "traumatic inflammation of the brain."

2. The conversion of a closed (simple) fracture of the cranium into an open (compound) fracture by incision of the scalp is, with the improved methods of treating wounds, attended with very little increased risk to life. In this respect, the dangers of open fractures over closed fractures of the skull do not correspond to the corresponding fractures of other bones.

3. The removal of portions of the cranium by the trephine or other cutting instruments is, if properly done, attended with but little more risk to life than amputation of a finger

through the shaft of the metacarpal bone. It remains for the opponents of trephining to show that the cause of death, when it occurs, is due to the trephine. President Briggs and some others consider the operation one of the simplest in surgery; but other authorities oppose that view. The comparison between fractures of the skull and amputation of a metacarpal bone, the speaker considered appropriate, because in each case there was exposed a small amount of cancellous bone tissue. Amputation of the finger may be followed by septicæmia and death, and so may the operation of trephining the skull, but neither is to be expected. According to Amidon, the mortality of trephining (3 6 per cent.) is less than that of amputation through the shaft of the metacarpal bone (4 to 5 per cent).

4. In the majority of cranial fractures, the inner table is more extensively shattered than the outer table. The element of danger in fractures is due solely to the splintering of the internal table. Necrosis of the splintered bone fragments is looked upon by some as the element of danger, but necrosis is of rare occurrence, and the true element of danger is the acute encephalitis that is excited by the splintering.

5. Perforation of the cranium is to be adopted as an exploratory measure almost as often as it is demanded for therapeutic reasons. This measure the speaker considered justifiable in all cases in which the injury was of sufficient severity to justify the belief that spiculation had occurred.

6. Drainage is more essential in wounds of the brain than in wounds of the other structures. This method had been greatly neglected, for surgeons who would be loath to permit an accumulation of pus to remain for an hour after its discovery in any other part of the body, would quietly allow a case to die from an abscess in the brain without an attempt at relief by operative procedure. Several cases were reported illustrative of this proposition.

7. Many regions of the cerebral hemispheres of man may be incised and excised with comparative impunity. The timidity of surgeons with regard to injuring the brain-substance by operative means, the speaker attributed to the prevalent ignorance on the subject of cerebral localizations. Deaths are not due to the exposure of the cerebral convolutions.

8. Accidental or operative injuries to the cerebral membranes, meningeal arteries, or venous sinuses should be treated as are similar lesions of similar structures in other localities. Numerous cases have been reported in support of this proposition.

9. The results of the study of cerebral localization are more necessary to the conscientious surgeon than to the neurologist. The time has come when a man, if he assume the role of a surgeon, must make the study of cerebral localizations a special feature of his education. When called upon to operate in cases of head-injury, he must in many cases be the only one to decide what shall or shall not be done.

The principles thus set down were next applied to cranial fractures, to intra-cranial hæmorrhage, to intra cranial suppuration, to epilepsy following cranial injury, to insanity following cranial injury, and to cerebral tumors. The following are the rules adduced:

A. Cranial Fractures.

(*a*) *Closed* (*Simple*) *Fissured Fractures.*

1. Where there is no evident depression, and no brain symptoms, no operation should be made.

2. In case of no evident depression, with brain symptoms, incise the scalp and trephine.

3. With evident depression, but no brain symptoms, incise the scalp and possibly trephine.

4. With evident depression and brain symptoms, incise the scalp and trephine.

(*b*) *Closed* (*Simple*) *Comminuted Fractures.*

5. Where there is no evident depression, and no brain symptoms, it is advised to incise the scalp and probably trephine.

6. In cases of no evident depression, with brain symptoms, incise scalp and trephine.

7. With evident depression, but no brain symptoms, incise scalp and trephine.

8. With evident depression and brain symptoms, incise scalp and trephine.

(*c*) *Open* (*Compound*) *Fissured Fractures.*

9. In cases with no evident depression, no brain symptoms, no operation is advised, but treat the wound.

10. Cases presenting no evident depression, with brain symptoms, should be trephined.

11. With evident depression, no brain symptoms, possibly trephine.

12. With evident depression and brain symptoms trephine.

(*d*) *Open* (*Compound*) *Comminuted Fractures.*

13. If there is no evident depression, and no brain symptoms, it is probably proper to trephine.

14. In case of no evident depression, with brain symptoms, trephine.

15. With evident depression and no brain symptoms, trephine.

16. With evident depression and brain symptoms, trephine.

As a working rule for surgeons, the speaker believed that these conclusions would be found reliable and correct. Trephining has become an operation of so little danger that every case of doubt should be treated by it.

B. Intra-cranial Hæmorrhage.

Trephine for the removal of a clot and the arrest of bleeding when the probable seat of hæmorrhage is ascertainable, and the clot is believed to be a localized one. The speaker then discussed briefly the symptoms which rendered the operation advisable and those which contraindicated it.

C. Intra-cranial Suppuration.

Trephine and make, if necessary, exploratory punctures in all cases of abscess. This is rendered more compulsory because of the fact that the spontaneous evacuation or other removal of an abscess in the brain practically never occurs. Early symptoms of pus mean, as a rule, "Do not operate;" later appearances of pus indicate, however, the propriety of an early operation. If the pus is not discovered beneath the dura, then incise the dura; and if the pus is not then discovered, aspiration should be performed, unless the symptoms disappear upon the removal of tension by the perforation of the dura.

D. Epilepsy following Cranial Injury.

Remove a portion of the cranium in selected cases.

Abscesses are usually situated in the anterior half of the cerebrum. The symptoms indicating the propriety of trephining in these cases are, a painful or sensitive cicatrix, and symptoms indicating brain irritation in the vicinity of the scar, especially if this be in the anterior half of the cranium. The temperature-test was then referred to, as also the statement of a modern writer that the temperature may be taken by placing a thermometer in the auditory meatus. The symptoms contraindicating operative procedure are the presence of signs indicative of inflammatory processes at other portions of the brain, the history of epilepsy or insanity in other members of the family. In these cases several months must elapse before the case can be pronounced one of failure. The operation should be done as promptly as possible.

E. For Insanity following Cranial Injury.

Remove a portion of the cranium in selected cases.

F. For Cerebral Tumor.

If it can be localized, and if it is probably superficial, remove the bone and excise the growth, if it is found.

Dr. Hunter McGuire, of Richmond, remarked that in reviewing the paper he could find but two instances in which an operation was not advised. This advice takes us back one hundred years, to the time when men used to boast of the number of holes they carried in their heads, and when surgeons boasted of the number of heads they had trephined. Such a doctrine he considered most injurious, especially upon the younger members of the profession. There are no set rules that can be laid down for the government of all cases; each case must be a law to itself. There are no two injuries of the skull that are the same any more than there are two faces exactly alike. Referring to the first proposition, he asked how the author could account for the almost immediate appearance of symptoms of compression of the brain in so many cases? A man receives a blow upon the head. The bone is depressed, the brain is compressed, and almost immediately, within a few minutes, or even within a few seconds, symptoms of depression are manifested. Is it possible that an inflammatory exudation could have developed so rapidly? Such seemed almost impossible. The author has compared the use of the trephine to the amputation of the metacarpal bone. It was either Cooper or Hunter who said that there was to the patient between the trephine and eternity a little thin sheet of paper. How the author came to the conclusion that the application of the trephine was so simple a matter he could not comprehend. He asserts that a man may even be trephined and immediately go to his home. With no disrespect, the speaker wished to know to which home Dr. Roberts referred, and whether it would not, in a great many cases, be the "long home." With regard to the importance of drainage in cerebral difficulties, he agreed with Dr. Roberts. In the last case of trephining which he had performed, he had taken out a piece of the scalp of a size to correspond to the size of the trephine, in order to secure thorough drainage. He then narrated several cases in which he had made use of the trephine. He presented the button of bone removed from a case of epilepsy, in which, while there was no depression of the external plate, there was marked depression of the internal plate.

During the operation a large portion of the cerebro-spinal fluid escaped, but the patient recovered. In one case, in which an individual had been insane for nine years, the day following the operation he spoke of events as occurring yesterday which had occurred nine years before, and uttered the first coherent words for that period of time. This was a case of depressed fracture from a blow with a boat-hook.

Dr. Moses Gunn, of Chicago, said that three years ago he had advocated the early operation in cases of cranial fracture with symptoms of depression, and had advocated the rule that in simple or closed fracture the bone should be elevated as in compound fractures, taking the ground that aseptic measures as now practised avert the danger that would otherwise exist in the conversion of a simple into a compound fracture. This rule, if properly applied, could be employed not only with safety, but with benefit to the human race.

With regard to the first proposition laid down by Dr. Roberts, he agreed, and believed that in many cases the symptoms arise not from depression but from irritation and inflammation. Mere mechanical compression of the brain is not a symptom of importance. As stated by Dr. Briggs three years ago, if compression of the brain was all that is to be feared, he would never use the trephine, because the brain would soon accommodate itself to the new pressure. The danger is in the changes of nutrition that follow. He did dot go so far as Dr. Roberts, however, and say that there are no such symptoms as those of compression. These symptoms, he thought with Dr. McGuire, were too distinctive in their character, and came on too soon after the accident to be due to any other cause. There is then mechanical compression, and not irritation or inflammation; but that mechanical compression does not require the application of the trephine. The danger of fracture of the skull—of permitting the pressure to remain—is that it may become permanent and excite irritation and inflammation that may do injury, in giving rise to secondary symptoms.

Dr. Charles B. Nancrede, of Philadelphia, as to the first proposition, agreed with the previous speaker. If Dr. Roberts were to call it secondary compression he would agree with him in the conclusion—that it is due to some form of inflammation. Compression of the brain produces sudden and violent contraction of the vessels of the brain in the vicinity of the compression. It is an error to associate in our minds the dangers of compound fractures of the cranium and compound fracture of other bones. They are not to be

compared. The conversion of a simple fracture of the skull into a compound one, he considered did increase the risks to the patient. In considering any operation we must consider the complications that may arise from it in the most skilled hands. He could hardly conceive how a serious complication could arise from an amputation of the metacarpal bone, but could very easily understand how serious complications could arise from operative procedures upon the skull.

As to the fifth conclusion, he would be very sorry to have his cranium perforated as an exploratory measure. On the seventh proposition he differed from Dr. Roberts. Nearly all the cases of operative procedure for brain-tumor have terminated fatally. The treatment of wounds of large arteries and veins is manifest, but in all cases where there is reason to suspect that a coronal sinus has been wounded, we should act as though that sinus had been wounded. He was cognizant of one or two cases in which the patient perished before the eyes of the operator because that assumption was not made. In one case which he had seen with Dr. Hopkins, this assumption was made, with the gratifying result of averting what would have been a fatal hæmorrhage. As soon as the button of bone was detached, there was a most appalling gush of blood. This was controlled by pressure and the vessel secured by suture, but great difficulty was encountered in the removal of the forceps by which the vessel was secured. Finally a piece of lint dusted with iodoform was placed over the ligature and the case went on to recovery.

With regard to the study of cerebral localization, he believed that we are now fairly acquainted with the motor centres. As for the sensory centres, however, much is yet to be learned, and he cited a case in which a mistake might readily have been made. There are few of them so well located that we can be sure of the point that should be uncovered. As for the reasons for the application of the trephine, he considered the subject one that should be given more deliberate investigation. How Dr. Amidon could have obtained such a number of cases with so low a mortality as 3.6 per cent. from trephining, he could not understand. From his investigations, he would place the mortality at about 10 per cent. Dr. Nancrede divides fractures of the skull into three classes :—one which will die, no matter what is done; one in which the patient will recover if the secondary results are prevented, and a third class between these two which requires careful treatment.

As to the importance of drainage he agreed with Dr. Roberts, but not to such a degree as asserted in the paper. In regard to the temperature-test, the speaker referred to its importance if it could be confirmed. In every case of which he could learn, in which a record was taken, where there was a pure cerebral abscess, or where the inflammation was confined to the brain-substance itself, the temperature was normal or subnormal. A puffy intra-cranial tumor does not indicate absolutely the presence of pus, but it does indicate osteo-myelitis, which is frequently associated with inflammation. He cautioned against waiting until inflammation had developed before applying the trephine. After inflammation has developed, there is no good that can be done by operative procedures, unless there was a mass of pus to evacuate. The symptoms of intracranial irritation can be recognized long before there is any change but an effusion of serum. Patients sometimes recover with foreign bodies within the cranium, but this is less likely to occur and less apt to be permanent than when they are removed.

Dr. Washington F. Peck, of Davenport, Iowa, thought the direct pressure of bone was capable of inducing cerebral symptoms. These symptoms more frequently are due to the products of inflammation. He referred to a patient who had been struck in the temporo-parietal region, and immediately exhibited the symptoms of compression, and so remained for twenty-four hours. Trephining was done, and he gradually regained consciousness. A few days later he had a convulsion, and an incision into the brain evacuated about an ounce of pus. The patient recovered. In the case of a boy shot a little to the left of the middle of the frontal bone, there were immediate symptoms of compression. The trephine was employed, and a large clot of blood escaped. To encourage free drainage, a poultice was applied. The boy is now perfectly well, although the ball was not removed. In a third case, a child received a depressed fracture from a blow with a piece of coal. There were no symptoms of compression, and he performed no operation, and the child is doing well.

Dr. Theodore F. Prewitt, of St. Louis, thought signs of compression may be due, not only to the depressed bone, but to the formation of the clot. Although the second proposition might be true, still that would not render it advisable to tap in every case. The results of a fracture of the skull are not due so much to the fracture, as to the amount of injury to the brain-structure and meninges. The bone will

repair itself without trouble. There is danger, however, in the too free use of the trephine. Some cases of fracture of the skull are unaccompanied by symptoms, and are recovered from without permanent ill effects; hence it is not proper to use the trephine in all cases. But where it is believed, from the nature of the injury, that there are very sharp, needle-like spicula, as in perforating wounds, it is proper to trephine, even in the absence of very severe symptoms. Although with antiseptic precautions we had greater control of inflammation, yet all authorities were not agreed as to the value of antisepsis—some refusing to use it at all. Compound fractures, whenever they may occur, are always more serious than simple fractures. The brain will bear a certain amount of compression from bone without apparent damage, and it is frequently noted that depressed fractures in children may disappear without treatment. Trouble follows in those cases where the brain and membranes are irritated. In regard to class B, if hæmorrhage were going on, it would be advisable to trephine; but if the symptoms were not urgent, it would be better to wait, for after a time the blood would be absorbed. In reference to proposition 5, he thought it allowed a wide margin, and that the doctor would not be willing to permit such a wide latitude in his own case.

Dr. Charles T. Parkes, of Chicago, could not agree in the first proposition so far as to say that symptoms of compression were entirely due to inflammation. These symptoms often occur immediately, and disappear as soon as the cause of depression is removed. Even if the second proposition were admitted to be true, he did not think it right to give the patient even a slight increase of risk without it was necessary. Although drainage is important, yet it is difficult to carry out. He referred to a case under his care in which there had been two or three fractures of the skull. There was a depressed one at the vault which was trephined. The membranes were not injured. A drainage-tube was introduced. There were no symptoms of compression during the next few days. On the fourth day there was the escape of a large amount of cerebro-spinal fluid, which soaked the dressings and pillow. The rarity of this accident was explained on the supposition that there was a laceration into the ventricle. In regard to injury of the vessels of the brain, in one case there was free bleeding from an opening in the longitudinal sinus, which, after trying other expedients, he checked by introducing three catgut sutures. The patient

recovered. In regard to the localization of the injury, he had a case bearing on that point. A man was struck with the barrel of a pistol in the upper and outer portion of the parietal bone. There was a large loss of brain-substance. He removed a piece of bone with the trephine, and during the operation still more tissue escaped. On introducing the finger, he found that it passed to the tentorium of the cerebellum, and there he found the sight of the pistol which had been broken off. According to the view expressed by Dr. Roberts, this man should have had almost entire loss of sensation.

Dr. J. Collins Warren, of Boston, thought drainage was difficult on account of the intracranial pressure forcing the tissues up and blocking the opening in the bone. Here there is pressure of the brain on a sharp edge of bone, and this may cause irritation. He then referred to the difficulties of diagnosis. In one case a child with a depressed fracture of the upper anterior cranial vault presented no brain symptoms, although there was some fever for a week. Then the child became completely deaf. At the autopsy there was found slight depression, and pus was found in the fourth ventricle. In a second case the patient was unconscious and delirious for four weeks before he died. No evidence of brain-lesion could be found at the autopsy, but a considerable quantity of blood-clot was found in the abdominal cavity. Cellulitis and periostitis of the tissues of the back of the neck might also be accompanied with brain symptoms. Concussion of the brain must also be considered in the diagnosis. In referring to localization of brain lesions, he described a case in which it was thought that there had been hæmorrhage at the vault of the cranium, involving the centre of motion for the legs. This had gradually gravitated to lower portions of the surface, for there was first paralysis of the leg, then of the arm, and then of the face, and the paralysis recovered in this order.

Dr. L. McLane Tiffany, of Baltimore, agreed in reference to the non-advisability of converting a simple into a compound fracture, and in regard to exploratory trephining. He considered it important to make a distinction between fractures occurring in childhood and the same occurring in adult life. He had seen a number of fractures in children get well without any bad symptoms, and in which the groove in the skull could be felt after the person had reached maturity, but where a similar injury to an adult would certainly have called for operative interference. A distinction is also

to be made between such injuries in the colored and in the white race. In the former shock is infinitely less, and inflammation follows quite a different course from what it does in the white. In those cases in which there was no depression and no symptoms, he could not understand where the trephine should be applied. Frequently the injury is on the opposite side of the brain.

Dr. S. W. Gross, of Philadelphia, thought there might be fracture of the skull without evident depression and without brain symptoms. There are cases of linear fracture. In such a case the dura mater may be separated from the bone and the effusion of blood may give rise to symptoms of compression, which, however, come on more gradually than when there is a laceration of the anterior branch of the middle artery. He considered a compound fracture of the skull more serious than a simple fracture. It is more difficult to carry out strict antiseptic precautions in such cases. Trephining is not as safe as amputation of the metacarpal bone. Drainage is more essential in wounds of the skull than in other injuries, but is an exceedingly difficult thing to accomplish. The drainage should be as thorough as possible. In a case of Dr. Noyes, a counter-opening was made at the vault of the skull, a tube passed through, and the patient recovered. In regard to the classes B, C, D, and E, there could be no question. In regard to cerebral tumors, more experience is required. In gun shot injuries of the skull, the opening should be enlarged and the finger or a suitable probe introduced to determine the direction of the wound and to remove the foreign bodies that may be present. It is of great importance to apply to the brain the same rules as are applicable to other soft tissues of the body. He referred to an extraordinary case in which a gunshot injury was seen by Fleura. The bullet passed completely through the brain and impinged on the opposite side. A trephine was applied at this spot and the missile found half an inch below the surface.

Dr. Edward H. Moore, of Rochester, advocated more radical measures in the treatment of gun-shot injuries of the brain than are common. When a ball traverses the brain, it is not usually found at the point where it strikes, but is deflected a little below this point. In his last case he had made a counter-opening and found the missile. He then attempted to carry a drainage-tube through but was not successful. He thought it would have been better if he had persisted in his effort.

SECOND DAY—WEDNESDAY,—MORNING

The discussion of Dr. Roberts' paper was resumed.

Dr. David Prince, of Jacksonville, Ill., thought the use of antiseptics placed trephining among the safest of operations. Where such precautions cannot be taken the result is very different. He described a case of compound comminuted fracture in which he trephined and made the proper antiseptic applications, but the patient refused to allow them to remain and died of septic meningitis. These precautions enable us to make exploratory operations without the fear of doing harm which was formerly experienced. An essential in the treatment of these cases, was absolute rest. The parallel between compound fractures of the skull and compound fractures of the thigh was correct with one difference,and that was that in the skull, the circulation being more active, the cure is more rapid.

Dr. John H. Brinton, of Philadelphia, said that the first thing the surgeon did to a patient with the symptoms of compression was to examine for depressed bone, which produces the symptoms which we desire to relieve by elevation.

He described a case in a boy seventeen years of age, in whom the fracture extended from the external to the internal angular process, the upper portion of the frontal bone overlapping the lower portion. The bone was at once sprung into position by the use of the elevator and almost immediately the patient recovered consciousness and talked rapidly. He believes in the early use of the trephine, but he did not believe that trephining was a trivial operation. The treatment of most cases of fracture of the skull is clear. The only cases in which there is doubt is where there is a simple depressed fracture without any, or with only slight symptoms. If we do not operate the man is exposed to many dangers. The treatment can be summed up in few words. The Doctor then read from Gross' "Surgery" several passages advocating operative measures in these cases.

Dr. T. McGraw, of Detroit, referred to a statement made yesterday that the brain would accommodate itself to pressure. This he did not believe and described a case in support of this opinion. A painter fell from a scaffold, producing a cup-like fracture. No operation was performed and he returned to his work with no apparent symptoms of cerebral irritation. Dizziness began to appear, and, a year after the injury, became so marked that he could not pursue his occupation. He then trephined the skull, removing the depressed portion. The internal surface of the button was per-

fectly smooth, and the dura mater beneath it was healthy. In that case the brain did not become accustomed to the pressure.

Dr. P. S. Conner, of Cincinnati, thought that by taking away the depressed fragments of bone the patient was given a better chance of avoiding the sequela of these injuries. In the case of children, we could temporize. He had been surprised at the confidence expressed in the treatment suggested for gun-shot wounds. It is hard to tell where a bullet goes to after it enters the brain, and, if some authorities are to be believed, the presence of a bullet in the brain does no harm. He did not consider it the part of wisdom to scoop out the injured brain substance, and carry drainage-tubes through. If there is a tract through which thorough drainage can be readily made, very well. In such cases as that described by Dr. McGraw, he thought that other conditions, such as blood-clot, would usually be found.

Dr. B. A. Watson, of New Jersey, described a case showing that even in the adult, as well as in children, the brain would become accustomed to a certain amount of compression.

Dr. Briggs said that there are two classes of injuries which are very distinct. One is a diffused injury, where the trouble is not located in the cranial walls, and where trephining would be of no service. A second class in which the injury is localized to the skull. In these cases it is the bone that is doing the damage, and here the use of the trephine is important. Where the immediate symptoms of compression are attributed to depression, trephining is of no use, for the symptoms are due to some disturbauce of the circulation, or of the nervous circulation of the brain, or to some other condition which will not be reached by the trephine. Where there is a hemorrhage the operation is indicated, but usually the patient dies. Where compression is due to formation of pus, it is to be evacuated on the same principle that we open an abscess in other portions of the body. The principal and only use of the treatment is to remove points of irritation produced by spiculæ of bone. We resort to the trephine at the earliest possible moment for the prevention of those conditions which cannot be cured if allowed to progress beyond a certain stage. The operation should be limited to that and to that alone.

Dr. Roberts stated that many of the Fellows had misunderstood the term compression. A depressed fracture of small extent cannot compress the brain, for the brain is so

soft and has a communication with the spinal column, so that the pressure is diffused, and it is only by a depression of a large portion of the cranium that compression can be produced. He distinguished between compression and pressure. In most of the cases cited the symptoms immediately following the injury are to be attributed to laceration, contusion, or the obscure condition called concussion of the brain. Inflammation of the brain might develop very rapidly and illustrated it by a reference to injuries of the conjunctiva which in a short time will produce evidence of irritation. In regard to his comparison of the risks of trephining with the risks of amputation through a metacarpal bone, statistics had shown that the risks of trephining were three per cent., while the risks in amputation of the metacarpal bones were 4.5 per cent. The case referred to by Dr. Parkes, had no bearing on the localization of brain-lesions, for in that case the destruction of tissue was far below the points which he had indicated. A careful reading of his propositions would show that he did not advocate trephining as had been represented, in all cases. In two cases it is contra-indicated; in another set it should possibly be done. He thought that in five years the same opposition would not be made to these views as had been made to-day.

Nephrectomy, its Indications and Contra-Indications.

Dr S. W. Gross, of Philadelphia, presented a number of statistics showing the result of the operation under different circumstances. The following conclusions were drawn:

1. Primary extirpation of the kidney is indicated, first in sarcoma of adult subjects; secondly, in the early stage of tubercular disease; thirdly, in rupture of the kidney or of the ureter; and, fourthly, in benign tumors.

2. Nephrectomy should not be resorted to until after the failure of other measures; first, in urinary fistulæ of the kidney or of the ureter; secondly, in protrusion of the kidney through a wound in the loin; thirdly, in recent wounds of the kidney or of the ureter made in the performance of ovariotomy, hysterectomy, or other operations; fourthly, in suppurative lesions; fifthly, in hydro-nephrosis and cysts; and lastly, in floating kidney.

3. The operation is absolutely contra-indicated, first, in calculus of an otherwise healthy kidney; secondly, in sarcoma of children; thirdly, in carcinoma at any age, unless the disease can be diagnosticated and removed at an early stage; and, fourthly, in the advanced stage of tubercular disease.

Nephro-lithotomy.

Dr. L. McLane Tiffany, of Baltimore, described the operation as performed in a young man twenty-six years of age. The stone was exceedingly large and it was necessary to break it up with a spoon and remove by means of a syringe. The debris collected after the operation weighed five hundred and fifty-six grains, and was chiefly phosphate of lime. A drainage-tube was introduced and the wound dressed with oakum and iodoform. The patient recovered without trouble and left the hospital twenty-five days after the operation.

The wound in the skin healed perfectly. One fact noted was that water injected into the wound would escape into the bladder. Dr. Tiffany thought the incision through the cortex of the kidney better than an opening of the pelvis. He would advocate opening that portion of the kidney which was exposed in the operation, displacing the organ as little as possible.

The Healing of Arteries after Ligation.

Dr. J. Collins Warren, of Boston, said after an artery is ligated it is invested with a protective layer of new tissue, formed from the peri-adventitial tissue, which, if well developed, gives great security against hemorrhage until the permanent cicatrix has grown sufficiently strong. This may be likened to the provisional callus of bone. There is also internal growth of callus formed from several sources, namely, the intima to a slight extent, the media, more largely, and from cells finding their way from the peri adventitia, at a late stage, through the retracted end of the vessel. From the muscular layer, cells project into the thrombus at an early stage. These develop into spindle cells closely resembling those forming the muscular layer. The thrombus is merely a passive structure, taking no part in the growth, but is protective, and affords an excellent medium in which the new tissue may germinate. When the provisional part of the internal callus has disappeared, we find remaining a cicatrix closely resembling the three coats of the artery, and affording, by virtue of its peculiar structure, an equally effective resistance to the pressure of the blood-column. The ligament which unites the two ends of the vessel represents in part the residue of the external callus, and also a portion of the walls of the vessel which have been absorbed during the inflammatory process. A vessel successfully ligatured in its continuity cannot, therefore, be said to have been "ulcerated" into two separate portions, but must be conceived of as a hollow tube which has solidified into a solid columnar

mass of tissue, a considerable portion of which subsequently shrinks into a cord. The closure of the ductus arteriosus was cited as illustrating a muscular cell-growth. The formation of the muscular cicatrix was especially dwelt upon as affording protection from aneurismal dilatation.

The Etiology of Tetanus.

Dr. P. S. Conner, of Cincinnati, said cases classed under this general head may be divided into two classes, one in which the spasms first effect the injured part, the other in which the spasms are primarily located in the muscles supplied by the nerves which have their origin in the medulla oblongata. It has not been positively determined in what way the affection is brought about, whether by the nerves, the blood-current, by extension of inflammation, by reflected irritation, by septic changes, or by the presence and development of micro-organisms.

He then reviewed each of these theories. Special attention was paid to the septic theory, the speaker considering that the balance of evidence was in favor of this being the origin of tetanus.

An interesting fact brought out in the discussion was the great frequency of tetanus after wounds of the hand with the toy pistol. Dr. Prewitt referred to two cases of recovery after the use of bromide of potassium, chloral and five drops doses of Fowler's solution every three hours, for two weeks in one case. He thought there was a special tolerance of arsenic in those affected with this disease.

The Association during the afternoon paid a visit to the Johns Hopkins University, at Baltimore.

THIRD DAY—THURSDAY—MORNING.

Dr. J. W. S. Gouley, of New York, read a paper entitled

Some Points in the Surgery of the Hypertrophied Prostate.

Since the time of Sir Everard Home, our knowledge of the pathology and surgery of the prostate gland has come from the single source of M. Mercier, of Paris. He has stated that fifty per cent. of all men above the age of fifty years are afflicted with more or less hypertrophy of the prostate, although only seven per cent. of these suffer marked signs of the disease. Dr. Gouley desired to direct particular attention to the physical exploration, and the medicinal and surgical treatment.

Physical Exploration. Digital examinations per rectum will give some idea of the size and consistency of the prostate; whether one lobe is larger than the other; if it is

nodulated or smooth; and whether it is of normal length or there is longitudinal increase. Other methods of examination are required before a diagnosis is arrived at. Ask the patient to urinate in the standing posture. Some idea of the condition of the prostate may be arrived at from the character of the stream. But a man with a constricted urethra voids his urine in precisely the same manner as a man with an enlarged prostate. The stream flows steadily for a time, then stops, a few drops escape, the stream again flows, then a few drops, then a dribble, and so on. After he has discharged spontaneously all the urine he is able, a soft catheter is introduced, and the residual urine drawn off, measured, and examined chemically and microscopically. It is generally cloudy. Dr. Mercier invented a small rectangular sound, which is of the greatest value. Its chief advantage is in the extreme shortness of its beak, being only seven-eights of an inch in length. Not only the size, but the exact form of the enlargement of this gland could in many instances be outlined; but for this purpose he had devised an instrument having two bars and possessing many superior qualities, all of which were detailed.

Medical Treatment. The idea of reducing the hypertrophied gland by purely medicinal means had been exploded long ago. Yet the fashionable remedies at the present time are mineral waters. He did not wish to condemn their use, but regretted they too often led to the neglect of other more valuable methods. Remedies can often be employed for the relief of concomitant symptoms and to the improvement of the general health of the individual.

Surgical Treatment. (1.) Mechanical means of relief; (2.) Removal of the organ by surgical means. All heard catheters should be discarded except in cases of false routes. Among other requirements for a soft catheter was that it should have as small and as smooth an eye as possible, and never two eyes. Small catheters are usually preferred, but too small an instrumsnt should never be used. Where false routes exist, a large catheter should be employed, and where this fails, the invaginated catheter of Mercier is usually successful, but it requires to be used wlth the greatest care and caution, for unless the surgeon keeps the male portion of the instrument under perfect control, it may do injury.

Evacuatory Catheterization should be commenced early in each case, but in old cases, where the bladder has become distended, it is of the greatest importance that all the urine be not removed at one time. The catheter should be used

from twice to five or six times daily. If the catheter be too freely used, many alarming symptoms are relieved and the individual appears to be in a much better condition than before; but at the expiration of a few days the individual begins to show symptoms of disease of the kidneys, which, rapidly increasing in severity, lead to his death at the expira- of a month or six weeks. In some cases there is great difficulty to determine the proper treatment. Without the use of the catheter the individual must succumb; its use is unsafe. Under such circumstances, withdraw but a small part of the residual urine at intervals of once in several days, until tolerance was established. In one case under his observation, the enlarged bladder, extending above the umbilicus, was mistaken for a hydatid cyst and tapped. After its true nature was discovered, the method of small and infrequent catheterization was adopted, with the effect of producing a toleration. Polyuria is, however, very apt to develop and carry off the patient.

Inject medicated fluids into the bladder in a quantity to correspond to the amount of urine removed. For this a solution of borax was most employed, but various other agents might be used, as when the urine was strongly alkaline, an acid might be added; when large accumulations of mucus and pus were present alkalies were indicated; when phosphates were deposited in the cavity of the bladder, he used weak solutions of acetate of potash. Carbolic acid he did not endorse, but considered nitrate of silver, in proper diluted solutions, one of the most valuable agents we possess. Morphia, hyoscyamus, or cocaine, may be added in cases of great vesical irritability. Hot and cold water have had their advocates.

Removal of gland was first done by means of incisions by John Hunter. Caustics have been employed; Dr. Physick, of Philadelphia, dilated the neck of the bladder; others have made compression with a metallic sound. Attempts have been made to ligate the tumor and some have tried to grasp it and tear it away with Jackson's lithotrite. Mercier devised an instrument for the removal of prostate in 1838, and since then he has made three modifications—one of incising, and two for excising the tumor. The author calls the instruments respectively, prostatotome and prostatectatome; and the operations prostatotomy and protatectomy. He claimed priority in such cases of reaching the prostate through the perineum and incising it. This was similar to the operation since described by Harrison.

Dr. S. W. Gross, of Philadelphia, considered the remarks especially proper in the treatments of patients after they have entered upon their "catheter life." He also endorsed the propriety of prostatotomy. There can be no doubt that the operative treatment of enlargement of the median portion of the prostate, giving rise to obstruction of the vesical orifice of the urethra, is capable of great advances. Up to the present date, prostatotomy, as practised by Mr. Reginald Harrison, fulfills the indication more surely and with less risk to the patient, than any operation that has been devised. In an old man, that surgeon opened the membranous urethra through the perineum. The obstruction was then divided, partly with a probe-pointed knife and partly by divulsion with the finger, and the edges kept apart for eight weeks by means of a large tube, through which a smaller tube was passed to conduct off the urine. The patient was able to go about in ten days. On withdrawing the tube, a large bougie was passed regularly until the perineal wound closed. All obstacle to normal micturition was overcome; the urine was passed every few hours, and the bladder was completely emptied. At the end of six months the patient had a paralytic seizure, but there was no necessity for a resort to the catheter. The case was a most unfavorable one for the operation, but the result was most brilliant. Through the small perineal wound the nature of the obstruction was accurately determined, and the incision was made with a degree of accuracy and safety which cannot be obtained with Mercier's cutting instrument passed through the urethra. In the *Gazzetta degli Ospitali*, for February 11, 1885, he found that Professor Bottini, of Pavia, has successfully operated on a similar case with the thermo-cautery applied to the median portion for forty-five seconds. A catheter was retained in the bladder for four days, when it was removed, and the bladder emptied every six hours. The first natural emission of urine took place on the twenty-fourth day. In three months micturition was normal, and the urine was clear and acid; three months and a half later the patient was fully restored to health. As in the operation of Mercier, there is no certainty in operation through the urethra with the thermo-cautery; and the great tendency of cicatricial tissue after burns to undergo undue contraction makes it a matter of grave doubt whether the improvement will be permanent. Hence the operation of Harrison is the better one, and is entitled to extended trial.

Dr. E. M. Moore agreed with Dr. Gouley that the greatest

element of danger in the cases is the complete evacuation of the bladder. The introduction of injections of borax, boric acid, etc., would prove of much service. The case in the paper in which, as an effect of a rapidly developed polyuria, twenty-seven pints of urine were withdrawn from a bladder in twenty seven consecutive hours, with a case treated by himself. He had obtained beneficial results from moral treatment, teaching the patient to overcome the desire to micturate until he could retain his urine for four hours at a time. Where the catheter could be tolerated, he preferred to use it only after the individual had evacuated as much urine as possible spontaneously; then introduce the instrument and withdraw the residual urine.

Dr. Gunn had employed the method of moral treatment with benefit for at least five years.

Dr. Gouley claimed priority for the operation of excision of the prostate. In some instances, due credit had not been given him, although Dr. Mercier had put it on record as his operation.

AFTERNOON.

Dr. Harold C. Ernst, of Boston, made some remarks on

Culture Experiments on the Growth of the Micro-organisms of Disease.

Most of the work in this field has been done by Rosenbach, who demonstrated that there are several forms of micro-organisms which are invisible with the use of the older methods of staining. The discovery by Koch of the method of culture by dry culture-media enabled Rosenbach to cultivate and render visible many of these otherwise invisible forms. He exhibited cultivations from a perinephritic abscess in which two forms of micrococci were observed, one white, the other yellow, (arias and albus). In a tumor of the leg he had found a micrococcus which differed from any that he had seen described, in that the cultivation was of a different color. To it he had given the name sepiacoccus, but the color was not a *pure* sepia. In his cultivations, the pus from whatever source was transferred to a sterilized fluid with all the precautions possible. The culture-media best suited to all purposes was the fleisch-peptone agar-agar of the Germans. He described the difference between the comma-bacillus of cholera, as described by Koch, and that of cholera morbus, chiefly in its behavior upon the gelatine culture-fluid—the former liquefying the gelatine to a greater depth in the same time than the latter.

Dr. Warren remarked that the methods of Rosenbach

promised an easy and sure method of diagnosis in many obscure surgical cases. In one instance to which Dr. Ernst had made casual reference, a tumor of the knee was incised, a small portion of the fluid or juice removed, and a cultivation of it made. The colony resulting was of a peculiar citron color, not described in the book of Rosenbach. The tumor was removed, and microscopic examination of it revealed that it was an epithelioma. He did not, however, go so far as to claim that he had found the germ of that disease. He has been in the habit of late of using sterilized cotton as a dressing of all wounds, and considered it better than ordinary applications. A temperature of 150° C. is sufficient to sterilize several pounds of cotton in an hour.

Dr. N. Senn, of Milwaukee, read a paper entitled

An Experimental and Clinical Study of Air Embolism.

It was based both upon a thorough review of the literature of the subject and a large number of original experiments. In some instances as many as forty experiments were reported in proof or disproof of a single statement. The treatise was divided into eleven chapters, from each of which were drawn a number of practical suggestions. He submitted the following *résumé:*

1. The presence of adventitious air in the vascular system during life gives rise to air embolism.

2. Each air embolus constitutes a mechanical source of partial or complete obstruction to the flow of blood in the vessel in which it is located.

3. Aspiration during the inspiratory movements of the chest is the direct or exciting cause of ingress of air into a wounded vein or sinus.

4. Elevation of the head is the sole predisposing cause of the entrance of air in wounds of the superior longitudinal sinus.

5. In veins, the predisposing causes consist in

(*a*) Elevation of the part wounded; (*b*) Pathological or anatomical conditions which prevent collapse of the vein when it is wounded.

6. Insufflation of a fatal quantity of air into a vein produces death by:

(*a*) Mechanical over-distention of the right ventricle of the heart, and paralysis in the diastole; (*b*) Asphyxia from obstruction to the pulmonary circulation consequent upon embolism of the pulmonary artery.

7. Insufflation of the same quantity of air into arteries is

less dangerous than when introduced into veins. When death is produced in this manner it results from:

(*a*) Acute cerebral ischæmia; (*b*) Secondary venous air embolism; (*c*) Intense collateral engorgement of the vessels of the brain and spinal cord, the manner of death being determined by the amount of air injected, and the direction in which the injection is thrown, as well as the time which has elapsed between the operation and the fatal termination.

8. Air injected into the arteries is really forced through the systemic capillaries into the venous circulation and right side of the heart by the powerful contraction of the left ventricle.

9. Air embolism of the pulmonary artery is relieved in a comparatively short time, provided the contractions of the right ventricle continue unimpaired for a sufficient length of time to force the air through the pulmonary capillaries into the general circulation.

10. The prophylactic treatment consists in proximal or double compression, or ligation, of the vein which is endangered by the operation.

11. The indirect treatment has for its objects:

(*a*) The prevention of the admission of air; (*b*) The administration by inhalation or hypodermatic injection of cardiac stimulants; (*c*) Venesection.

12. The direct or operative treatment by:

(*a*) Puncture and aspiration of the right ventricle; (*b*) Catheterization and aspiration of the right auricle, which is proposed with a view to obviate the direct cause of death by the removal of air and spumous blood, thus relieving directly the over distention of the right ventricle, and, at the same time, to guard against a fatal embolism of the pulmonary artery.

13. The results obtained by experiments upon animals warrant the adoption of the operative treatment of air embolism in practice, as a last resort, in all cases where the indirect treatment has proven inadequate to meet the urgent indications.

In Executive Session, the following were

ELECTED OFFICERS FOR THE ENSUING YEAR.

President.—Dr. Moses Gunn, of Chicago.

Vice-Presidents.—Drs. Christopher Johnston, of Baltimore; Thomas P. Russel, of Oshkosh, Wisconsin.

Secretary.—Dr. J. R. Weist, of Richmond, Indiana.

Recorder.—Dr. J. Ewing Mears, of Philadelphia.

Treasurer.—Dr. John H. Brinton, of Philadelphia.

Member of Council.—Dr. L. McLane Tiffany, of Baltimore.

Chairman Committee of Arrangements.—Dr. J. S. Billings, of Washington.

Time and Place of Next Meeting.—Washington, D. C., on the Wednesday preceding the meeting of the American Medical Association.

The following offered by the Council was adopted:

That names of candidates for admission must be accompanied by a statement of official positions held, writings, and the claims upon which the application is based.

Resolved, That at future meetings of the Association one hour be the limit of time allotted for the reading of a paper.

Fourth Day—Friday—Morning.

The discussion of Dr. Senn's paper was taken up.

Dr. Warren, of Boston, thought the lesion was of more importance in obstetrical than in surgical practice. The entrance of a certain amount of air into veins was not rare, but alarming symptoms were not frequently met with. It was of importance only when some large venous sinus was opened. It was in obstetrical practice where we met with this accident in all its hideousness. Several cases of air-embolism had occurred in Boston, and had been due to efforts to produce abortion. It had been stated that in these cases the only function of the physician is to be present at the autopsy and confirm the diagnosis, and this about expressed the truth. Theoretically, aspiration seemed to be indicated, but probably there would never be such a consensus of circumstances as would enable the operation to be practiced. Such accidents were like a stroke of lightning; the patient was dead the moment the accident was recognized.

Dr. Seth C. Gordon, of Portland, related an interesting case in which the accident had resulted from the unskillful use of an aspirator in a case of pelvic abscess.

Dr. C. B. Nancrede, of Philadelphia, said that Dr. Senn had referred to the fact that in the horse the injection of large quantities of air was required to produce a fatal result, and had ascribed this to the strength of the right ventricle in that animal. A better explanation was the fact that the pulmonary capillaries in that animal were larger than in most other animals. The one thing chiefly necessary for free capillary circulation was a proper density of the blood. As a result of the admixture of air with the blood, its density

was suddenly altered and it would not circulate through the lung capillaries. The fact that spumous blood would pass through the pulmonary capillaries of the horse was to be explained by the size of the vessels. He did not think that death was a simple matter in air-embolism. The chief cause was anæmia of the center of respiration. In the experiments which have been related large quantities of air had been introduced, and the heart was distended with air; but this was not the case in the accidental entrance of air during an operation. In such cases, the heart is frequently not distended with air, and often beats with great force after the cessation of respiration. Death resulted from the want of arterial blood in the center of respiration. This was probably produced by the alteration in the physical conditions of the blood interfering with its power to close the cardiac valves, so that it was churned from ventricle to auricle. Under such circumstances, aspiration might be valuable. In operations on the neck or axilla, the constrained postures in which the body was sometimes held might tend to hold the vein open and permit the entrance of air. Traction on a tumor while dividing its last attachments would do the same thing. There was another rare condition, namely, the division of a vein in the angle of the wound, so that when the flap was raised the vein was held open. Dr. Senn had remarked, in regard to the case in which air had been supposed to have been generated in the blood, that in all the cases free hæmorrhage had occurred, and that there might possibly have been an open vessel. He had had a case in which this explanation could not have been correct. There were several other instances on record, especially in cases of septicæmia, where the cellular tissue was full of gas. The preventive treatment was of far more importance than the curative. In operating in a position where there was danger of the entrance of air he always adopted certain precautions. He considered complete anæsthesia of great importance. In removing tumors from the neck, he usually tied the deep attachments or secured them with forceps before removing the tumor. If possible, he never made a cut when there was any tension on the neck or axilla, unless a finger was placed on the vein on the cardiac side. When the accident had occurred, artificial respiration in the incumbent position was of great importance. The further entrance of air was to be prevented by ligating, or, if this could not be done, by squeezing a sponge into the wound. Besides the ordinary remedies to sustain the action of the heart, he would recom-

mend atropine. With atropine the pulmonary capillaries could be dilated to their fullest capacity, and it also stimulated respiration. If the patient could be kept alive for a short time, he might recover temporarily. After snch recovery, however, a form of pneumonia usually appeared which was to be treated like the ordinary form.

Phosphorus Necrosis of the Jaws.

Dr. J. Ewing Mears, of Philadelphia, read a paper on this subject, which closed with the following conclusions: 1. That the disease was a local expression of the constitutional condition produced by the inhalation of the vapor of phosphorus, and by particles of the agent taken into the system with the food by operatives in match factories who did not give proper attention to cleanliness of the hands. 2. That the introduction of the agent into the system was, as a rule, very gradual and in such small quantities as to avoid the production of symptoms of acute poisoning. That in this way the chronic toxic condition of the system was induced, characterized chiefly by disintegration of the red blood corpuscles and fatty degeneration of the arterial coats. 3. That the toxic condition preceded the jaw disease, as was shown by the fact that the disease did not attack operatives recently exposed to the action of the agent, but those who had been exposed for a period of years. 4. That examination of the teeth of operatives had shown that many who had caries, and had returned to work immediately after the extraction of teeth, had enjoyed immunity from the disease, showing that the agent had not attacked the periosteal tissue thus exposed. This was further shown by the fact that in one of the cases necrosis did not appear until three months after labor in the factory had ceased. 5. That individuals varied in their susceptibility to the action of the poison; for this reason many suffered immediately with acute symptoms, such as nausea, vomiting, etc., and were compelled to abandon work in the factories. 6. That the conditions under which experiments had been made on animals, to prove the absence of the disease until exposure of the periosteum and peri-alveolar tissue was effected, were not similar to those to which operatives in match factories were subjected. 7. That treatment of the disease in the primary stage was efficient and prevented its progress. 8. That the antidotal powers of turpentine had been established. 9. That the disease was to be prevented among operatives by the adoption of thorough methods of ventilation, stringent rules with regard to cleanliness, and the free disengagement of the vapor of tur-

pentine in all the apartments of factories in which the fumes of phosphorus escaped.

Case of Cholecystotomy,

by C. T. Parkes, M. D., of Chicago, was read by Dr. Moses Gunn. A lady aged twenty-nine had suffered for sometime with symptoms of hepatic trouble. The diagnosis of obstruction of the common duct was made. All forms of medical treatment having been tried without result an operation was performed. This consisted in making an incision over the position of the distended gall-bladder, aspirating it, stitching it to the abdominal incision, then opening it freely, and evacuating a considerable quantity of muco-biliary fluid. No stone could be detected at this time. Several days later seven small calculi were removed. The patient recovered from the operation without any bad symptoms. The condition was improved, but the bile still failed to flow into the intestine. One month later a second operation was performed, which consisted of extending the incision, and passing a sound through the cystic duct into the bowel. This was followed by decided benefit, the bile escaping into the bowel, and it still continues to do so. The fistula soon healed. Four months later she was attacked after exposure with pain similar to that which she had originally experienced. This was attributed to increased narrowing, preventing the free escape of bile, and an incision was therefore made, re-opening the old fistula. This gave complete relief.

Dr. Mears insisted on the surgeon having a thorough knowledge of these affections, so that he might be able to make a correct diagnosis. He did not favor exploratory operations in these cases. The importance of instituting proper treatment to prevent the recurrence of the trouble was spoken of. If this was not done the operation would probably prove of only temporary benefit.

Dr. Tiffany called attention to the difference between the behavior of a unilateral and that of a bilateral organ when its duct was obstructed. In the cases of the liver almost complete obstruction might exist for a long time without serious injury, while if there was obstruction in the kidney it would in a comparatively short time become disorganized.

Dr. Prewitt, in speaking of the difficulties of diagnosis, described two cases in which the distended gall-bladder was distinctly felt on palpation. One was the case of a man seventy years of age who had never exhibited any symptoms of hepatic colic, who was suddenly seized with pain and collapse. On palpation the distended gall-bladder, containing

a number of stones, was distinctly felt. The patient never reacted from the collapse and the correctness of the diagnosis was shown at the autopsy.

An apparatus for rapid anæsthesia was exhibited by Dr. Mears. This he had devised in August, 1884. It consisted of a metallic mask fitting over the mouth and nose and connected by a tube with a bottle containing ether. The bottle is placed in a basin of warm water which causes the ether to be vaporized, and it thus reaches the patient in a very concentrated form. If preferred, the bottle may be connected directly with the mask and the ether allowed to pass slowly on to the sponge within. In this way the escape of ether into the room is largely prevented.

The committee on publication were authorized to add the vignette of the late Prof. S. D. Gross to the seal of the Association.

The President-elect was conducted to the chair and made a brief address, thanking the Association for the honor conferred upon him.

Votes of thanks were extended to the retiring officers and the committee of arrangements, after which the Association adjourned.

Analyses, Selections, etc.

Phimosis in Childhood and Its Treatment.

Dr. Morris H. Henry, of New York city, in the April number, 1885, of the *American Journal of Obstetrics, etc.*, states that during his twenty-five years of professional life he has operated on at least three hundred cases of phimosis. During infancy, the irritation that results from the accumulation of the urine and secretions between the glans and prepuce because of congenital phimosis, frequently causes constitutional disturbance. When the prepuce is long and the opening very narrow, there is no chance whatever of enlarging the orifice or of uncovering the glans so as to cleanse the parts except by circumcision. He believes a healthy prepuce, normal in size, length, size of opening and freedom of retraction is the exception and not the rule. However, he has never seen a case of paraplegia or hemiplegia caused by genital irritation due to a contracted, elongated and redundant prepuce with a constricted meatus urinarius; but he has

frequently seen cases of infantile paralysis where there was also severe phimosis, yet circumcision has not cured the paralysis. He challenges the statement of any cure of paralysis—co-existing with phimosis and associated genital irritation—cured by circumcision. Circumcision and division of the constricted meatus will relieve the *reflex* nervous disturbances caused thereby, but will do nothing more. It will not cure *congenital infantile paralysis.*

Among the effects of congenital phimosis are dysuria, nocturnal incontinence of urine, "night-terrors," etc. As rerults of the straining in dysuria, prolapsus ani, hemorrhoids, possibly hernia, etc., may occur. Many symptoms simulating those referring to stone in the bladder have been noticed. These and other effects of phimosis may be relieved by circumcision, which is the only radical cure.

The instruments required for circumcision are a pair of phimosis forceps (known as Henry's), a pair of strong flat-bladed scissors, or a flat, broad-bladed scalpel, a pair of ordinary surgical scissors, a pair of ordinary forceps, a pair of artery forceps, a grooved director, some needles and ligatures, sponges, etc. There should be one good assistant. The prepuce should be drawn gently forward in front of the glans penis, allowing an easy, non-restricted covering of the glans by the prepuce; the phimosis forceps should then be adjusted so as to retain in front of the blades only the redundant portion of the foreskin to be taken off with the scissors or knife. The incised mucous membrane will then be exposed, and it will be seen that the division of the mucous membrane has not been sufficient to uncover the glans freely. This is due to its greater restrictiveness, as an investing membrane, and to its smaller calibre than the skin. This membrane should then be slit upwards on the dorsum of the glans sufficiently to allow of easy retraction and perfect coaptation after retraction, and the projecting corners are then to be snipped off with scissors. Hæmorrhage from any small vessel may be arrested by torsion, or, better, by catgut ligatures. If there are any adhesions and they are not too firm, they should now be broken up, and the two partially-united surfaces between the foreskin and the glans pulled or torn apart, avoiding too much violence.

Congenital constriction of the meatus urinarius is invariably associated with phimosis. The extent and character of the constriction is usually a narrowing of the outlet, scarcely admitting a small probe, and caused by a band of skin and mucous membrane that is stretched across the end of the

urethra. This forms a cul-de-sac that retains secretions and is frequently the source of much annoyance. In some instances, there is only a narrow band across the centre of the orifice, allowing the water to escape by the lower outlet. Occasionally, there is a small hypospadias with slender connecting bands in the fossa navicularis. The degree of genital irritation in such cases depends on the character of the constriction and the ease or difficulty of passing water. The treatment is simple—division of the constricting tissues. A small, straight, blunt-pointed tenotome is to be passed gently in the urethra, about half an inch beyond the constricted tissues—the blunt edge of its long axis being gently pressed against the upper wall of the urethra during its insertion, and the cutting edge pressed gently and slowly downward and against the part to be divided as it is withdrawn. Do not let the cut be too long or too deep. Dr. Henry prefers the tenotome to Civiale's bistouri-caché.

The simple constricting band—the ordinary constriction of the meatus—may be easily and safely divided with a small pair of blunt, olive-pointed surgical scissors, by inserting the blunt end of one blade in the urethra, the sharp edge pressed from above and downward to the floor of the urethra, and the blades then closed. A clean and precise cut is made. The after-treatment necessitates the introduction, once daily, of a catheter of the size of the urethra. In infants, the wound may then be dressed, dusting with a little iodoform, securing the raw surfaces in immediate contact and retaining them with carbolized lint or linen, slightly smeared with cosomoline and cold cream. A small opening should be left in the cloth dressing, which is then folded back and secured with some thread, and a T bandage applied. In the period beyond infancy, to secure union by the first intention, it is necessary to insert a few stitches to hold the cut edges in immediate contact. Medium-sized catgut ligatures or fine iron-dyed silk will best answer the purpose. Dress the wound twice daily, keep the parts absolutely clean and free from irritating secretions. The wound will heal in from two to four days, and at the end of a week there will be a perfect recovery.

Treatment of Injuries of the Head.

Dr. G. D. Ladd, of Milwaukee, contributes an article on this subject to the *Transactions of the State Medical Society of Wisconsin*, 1884. He mentions the fact that a greater power of repair is present in the upper than in the lower extremi-

ties. This is due to the distribution of the blood-vessels which establish more liberal collateral circulation in the upper extremities, and also to the nerve supply. Unquestionably, too many digits are sacrificed through a lack of confidence in the reparative power of nature. Most of us can recall instances of injury to the fingers in particular, where we have been surprised at the almost perfect restoration which has followed severe wounds to the joints, tendons and soft parts, where there has been even extensive loss of tissue and fracture of the bones. When such injuries occur in perfectly healthy persons, and the patient can spare the time, conservative surgery should be practised; primary amputation, at least, is rarely required. Wait until it is proven that the finger cannot be saved, unless urgent symptoms demand its removal. Where there is even extensive laceration of the soft parts, with or without fracture or comminution of the bones, an effort should be made to save the member whenever the circulation is not entirely destroyed in the distal portion. When the bone has been injured, remove the loose pieces and the ragged or denuded ends, and splint the hand or finger. But if amputation become necessary, the principle in general which should guide the surgeon as to the selection of the point for operation is, remove only sufficient of the bone to allow it to be covered by sound tissue; or if the injury involves a part where it becomes very important for the usefulness of the hand that all be saved that is possible, as in the end of a finger, a portion may be left to heal by granulation. Amputation of the phalanges in their continuity may be done close to the distal extremity or beyond the insertion of the tendons; otherwise a better result is obtained by disarticulation, or by removing the head of the adjoining bone. Care must be taken, in after-treatment, to maintain the temperature in the distal extremity after severe injury, and not to permit the dressing to interfere with the circulation. Cleanliness and other antiseptic precautions are essential. Secondary amputations must be done upon the same general principles. A man's occupation also has some bearing in deciding as to where to amputate. If a merchant or a professional man, the after-appearance of the member may be considered; but if a mechanic or a laboring man, the usefulness of what is left of the hand alone should have weight.

Book Notices, &c.

A Manual of the Medical Botany of North America. By LAURENCE JOHNSON, A. M., M. D., Lecturer on Medical Botany, Medical Department of the Univesity of the City of New York, etc. With Nine Colored Plates. New York: Wm. Wood & Co. 8vo., pp. 392. Wood's Library of Standard Medical Authors; December, 1884. (For sale by West, Johnston & Co., Richmond, Va.)

The author believes there is a place in medical literature which can be properly filled by a work of this kind, and the best evidence of the sincerity of such belief may be found in the years of patient labor which he has given to the completion of this book. He thinks that many earnest students need such a work to satisfy their desire for a better understanding of medical botany; and, if such a need exists, as far as we are capable of judging, Dr. Johnson has supplied it. It is greatly to be regretted that more interest is not taken in this subject by practitioners at large. To those who could make the necessary leisure time from practice, it would be exceedingly interesting, and to all, valuable. As the author remarks, much of the wonderful credulity evinced regarding so-called new remedies of vegetable origin would cease, being due at the present time mainly to gross ignorance of general botany and the peculiarities of plant species. To the country physician, above all others, is Dr. Johnson's book of value. He will be surprised to find with what interest the study will be followed up. The author has enjoyed the best of facilities for perfecting a text-book of this kind. Beyond his practical experience in botanical research in different parts of our continent, the knowledge of the natural wants of the student, derived from an almost daily contact of a class for several years, necessarily gives him a fair idea of what is required in such a volume, and we recall the name of no man better qualified for the task. To those interested in the subject the book is extremely valuable.

C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Registration of Physicians of the State of Louisiana under Act of 1882. [To any one interested in the profession of this State the pamphlet is of great value.] (Reprint from *Report of the La. Board of Health*, 1882.) Pp. 16.

Outline of the History, Theory and Practice of Quarantine, etc. By JOSEPH JONES, M. D., President of the State Board of Health of Louisiana. New Orleans, 1883. [A very good consideration of the relations of quarantine to commerce, and to constitutional and international law.] Pp. 30.

School Hygiene. By CHARLES J. LUNDY, A. M., M. D., Professor of Diseases of the Eye, Ear and Throat in the Michigan College of Medicine, Detroit. [This practical paper, read before the American Health Association in 1883, is well worth examination by every one interested in the health of our public school children.] Pp. 16.

Influence of the Constant Use of High-heeled French Shoes upon the Female Form, etc. By S. C. BUSEY, M. D., Washington, D. C. [We have been very much interested in this pamphlet. The author shows in plain words why the female foot has degenerated. The evils of the modern shoe are plainly set forth.] Pp. 19.

The Physician is a Good Man, Skilled in Healing. By THEOPHILUS PARVIN, M. D., LL. D., Professor of Obstetrics and Diseases of Women in the University, Louisville, Ky. [This address, like all of Dr. Parvin's, is well worth reading.] (Reprint from the *Louisville Medical News*, 1883). Pp. 29.

The Corpora Quadrigemina, etc. By AMBROSE L. RANNEY, M. D. [An article based on lectures delivered before the class of the Medical Department of the University of New York, treating of the minute anatomy and pathology of this portion of the brain.] (Reprint from the *Medical Record*, August 18, 1883.) Pp. 33.

An Answer to "A Protest Against the Use of the Metric System in Prescribing." By D. WEBSTER PRENTISS, M. D., Washington, D. C. [A first-class argument on the side of the controversy mentioned.] (Reprint from the *Medical News*, November 24, 1884.) Pp. 10.

Clinical Report on Cases of Lacerated Cervix and Ovariotomy. By JOSEPH H. WARREN, A. M., M. D, Physician to the Massachusetts Home for Intemperate Women. [A really instructive clinical article from the experience of a close observer.] Pp. 19.

Club-Foot. Is Excision of the Tarsus Necessary in Children? By DE FOREST WILLARD, M. D., Lecturer on Orthopœdic Surgery, University of Pennsylvania, etc. [Considering the space occupied, one of the most exhaustive studies of this unfortunate condition we have examined.] (Reprint from the *Transactions of the Medical Society of the State of Pennsylvania*, 1884.) Pp. 59.

VIRGINIA MEDICAL MONTHLY,
[Established April, 1874.]
RICHMOND, VA.

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EDITORS AND PROPRIETORS:
LANDON B. EDWARDS, M. D.....WILLIAM H. COGGESHALL, M. D

Original Contributions solicited from all sections; but the Editors do not hold themselves responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the editors. Rejected articles held one month at disposal of the writer.

Editorial.

The "Richmond Typhoidal Fever."

For a year or two past, there has prevailed in this city, with greater or less intensity at different periods, a fever which has greatly perplexed practitioners, as it has also brought sorrow into the homes of some of our citizens. It has been classed as a "typho-malarial fever," and as such has been much discussed by the doctors of the State. A definite geographical limit has not been thrown around it; for we have heard of it time and again in other sections of the State, as well as in Texas and other States. In and about Staunton and Danville, Va., as well as in this city, the disease has occurred. Even from some of the country places—more or less remote from the cities named, and thus uncontaminated by city miasm—have we heard reports of cases. But it is chiefly in the cities named that the special form of fever to which we now refer has prevailed.

The terminations of this fever so closely resemble a hybrid type of typhoid fever, complicated by a distinctly malarial element, that the name typho-malarial fever would not seem inappropriate. We would not be understood as implying but that very many of the cases which are classed under this head by practitioners as simply typho-malarial fever—are simply such and nothing more. The signs and symptoms, from the beginning malaise to the end of such cases, indicate it. About such cases, which have constituted by far the majority of supposed illustrations of the so-called "Rich-

mond fever," there can be no reasonable question as to their nature.

But during the Spring and Summer of 1884, and again since the Spring of 1885 began, we have attended several cases which had a peculiar ushering in, and which may deserve the prominence of this special record. The subjects have been mostly children of ages from three to fifteen years. Sex has appeared to bear no relation to the sickness. The residences of the patients have been in different parts of the city—on different hills and in different valleys. The dormitories have been mostly on the second and third floors of houses. The care of the children has been generally good —not specially exposed to night air nor other conditions which were not common to all other members of the same household who have escaped attack—such as drinking water, heating arrangements, water closets, etc. It was not usual to observe more than one member of the family sick at one time with the peculiar fever. The attacks have been generally ushered in by a marked chilly sensation or a decided chill—the patient not having manifested any previous indisposition. With the subsidence of the chill, fever ensued, but no sweating stage came on. The pulse would run up to from 110 to 120 in frequency where it would remain for several days, but of different and varying qualities; and the temperature would rapidly shoot up to 103° or 104° or even higher, by the end of the second day. Peculiar symptoms would, in the meantime, present themselves. In some, sore throat would develop to-day to give place to cerebro-spinal meningeal symptoms to-morrow, which within the next day or two would subside, under almost any treatment, into a pure typhoid or typho-malarial fever, and run the usual course of such fevers. If this special form of onset did not take place, symptoms of some other acute inflammatory trouble would begin the fever. The symptoms of the acute inflammatory disease—whatever that disease was—ran a remarkably short period, scarcely ever extending over four or five days, when the thermometric waves would assume the curves of a developing typhoidal disease. We have just passed through a case at this writing—a boy nine years old in which the fever began as a peritonitis, the temperature rising rapidly to above 105.° The peritoneal symptoms suddenly gave way about the end of the seventh day, and the temperature sank to about 102°—with the usual ascending and descending curves around this general standard day and night. Hæmorrhage from the bowels is exceedingly rare,

though epistaxis early in the disease is common, but this does not persist beyond about ten days—if so long. Such, in brief, is an outline sketch of what is known at present, in this community, as the "Richmond fever." Many practitioners even of this city of large experience and extensive family practice have yet not met with a case like the disease we here refer to, and even deny the existence of such a peculiar train of symptoms; but others have had such cases—the like of which they have not before seen.

In connection with this record, it has seemed to us worthy of more than passing mention to call the attention of the profession to the value of Fowler's solution of arsenious acid in the treatment of both the fever we have referred to, as also of the unmistakable, uncomplicated cases of typho-malarial fever as it prevails in this section. During the several years that the Senior Editor of this *Monthly* had charge of the hospital ward of the United States Marine Hospital Service at the Port of Richmond, he adopted the use of Fowler's solution in all cases of typho-malarial fever that came under his charge (of which there were a goodly number), and with invariably good success. In all the cases he has since attended in private practice—both the imported and Richmond developed cases—he has relied upon this solution as far exceeding in value quinia and other remedies he had used or seen used by other practitioners. The duration of the fever itself has seemed to be abbreviated by this agent. Turpentine and other agents, or course, are to be used coincidently to meet special indications. In many cases, during either of the fevers alluded to in this note, there is a notable tolerance of Fowler's solution; but as a precautionary measure we would advise commencing with the doses of about three drops properly diluted every five or six hours for a child eight or ten years old, increasing the size of the doses as rapidly as may be found safe or sufficient. In one case a child about ten years old—we ran the dose within three days to thirteen drops four times in twenty-four hours without observing any poisonous effects of arsenic, but with pronounced control of the fever.

Dr. James Parrish.

At the meeting of the Executive Committee of the Medical Society of Virginia, April 16th, 1885, Dr. James Parrish, of Portsmouth, Va., was duly nominated to the Governor of Virginia for appointment on the Virginia State Board of Medical Examiners to fill the unexpired term occasioned by

the recent death of Dr. Thomas B. Ward, of Norfolk, Va. The full term of four years dates from January 1st, 1885. We do not believe that a better selection could have been made from the Second (Virginia) Congressional District. Dr. Parrish, besides possessing all the accomplishments of a gentleman, is a thoroughly practical physician who keeps himself constantly informed as to scientific progress.

The American Medical Association.

Full reports of the Proceedings of the Session which adjourned May 1st will be published in our June issue. As we go to press, we hear that the meeting in New Orleans was a great success. Dr. Brodie, of Detroit, was elected President. Dr. N. S. Davis consents to retain the Editorship of the *Journal of the American Medical Association* for another year.

The Earth Closet.

We have been shown by one of our patients in this city the model of a new invention in the line of earth closets which seems to us to combine both simplicity and great practical value. It acts automatically, depositing each time a sufficient quantity of earth in the box beneath by means of a very ingenious yet simple system of steel springs. When one considers the number of houses in every city totally unsupplied with sewerage facilities, the value of such an invention can be readily conjectured, as one of its principal non-sanitary points of recommendation is the small expense required in its construction. Every householder living out of town must be interested in an affair of this character, and we trust that many of that class will see the benefit to be derived from the employment of a device of the kind and when placed upon the market appreciate the individual merits of Mr. Lewis' invention. Any one interested in this matter may address John C. Lewis, Richmond, Va.

Dr. Stapleton Coates.

This veteran in the ranks of the profession by virtue of over fifty years' active practice, has been severely ill this winter at his residence near this city. He owes his recovery, he thinks, to the fact that the lancet was freely used, and says that notwithstanding the "old fogies" and "young fogies" he managed to get well through the efficacy of blood-letting. May he long live to sing the praises of his most valuable and trusty ally—the lancet—is the sincere wish of the editors of the *Monthly*.

Destruction of the Northwestern Medical College by Fire.

On March 27th the Northwestern Medical College, located in St. Joseph, Mo., was entirely destroyed by fire. Not only the building, but all the furniture, specimens, etc., were lost. The Faculty of the College, however, intend opening the regular session this fall at the same time as has been customary in past years. The instiution has been progressing so well under its present management lately that it is a great misfortune to have even this temporary setback. We wish those connected with it a continuance of deserved prosperity.

Berlin as a Medical Centre.

There will be issued by the New England Publishing Company, of Sandy Hook, Conn., during the month of May, 1885, a book bearing the above title, by Dr. Horatio R. Bigelow, of Washington, D. C. The book will be a complete and accurate medical guide to Berlin, giving instructions in reference to board, clinics, lectures, expenses, etc., and all information that will be necessary for the medical student abroad. The price will be $2.

Obituary Record.

Dr. Thomas B. Ward.

The following preamble and resolutions were adopted by the Committee of the Medical Examining Board of Virginia and have been sent us by the Secretary, Dr. Hugh T. Nelson, of Charlottesville, Va.:

WHEREAS, It has pleased Almighty God to remove from his earthly labors Dr. THOMAS B. WARD, of Norfolk city, be it, therefore—

Resolved, That by the death of Dr. WARD this Board has sustained a grievous blow; its individual members have lost a beloved co-worker and friend, and the profession at large a worthy, exemplar.

Resolved, That we extend to the family and friends of Dr. WARD our sincerest sympathy as a body and as individual friends.

Resolved, That a copy of these resolutions be forwarded to the family of Dr. WARD, be spread upon the minutes of the Board and published in the medical journals of the State.

[Signed] H. GRAY LATHAM, M. D.,
FRA. D. CUNNINGHAM, M. D.,
ROBT. J. PRESTON, M. D.,
Committee.

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Proceedings of Societies, Boards, etc.

AMERICAN MEDICAL ASSOCIATION.

FIRST DAY—TUESDAY, APRIL 28TH, 1885.

The Thirty-sixth Annual Session convened in Tulane Hall, in city of New Orleans, La., at 11 A. M., and was called to order by Dr. Samuel Logan, Chairman of the Committee of Arrangements. After prayer by Rev. B. M. Palmer, D. D., of the Presbyterian Church, Dr. Logan formally introduced the President of the Association, Dr. Henry F. Campbell, of Augusta, Ga., who at once assumed the chair. The Secretary, Dr. Wm. B. Atkinson, of Philadelphia, and other officers, were in place. Dr. Logan then delivered the *Address of Welcome*, which offered a cordial greeting to all.

After the *ex-Presidents were seated on the platform*, by invitation of the President, and after announcement of entertainments, etc., Dr. Campbell delivered the

ANNUAL ADDRESS OF THE PRESIDENT.

He expressed his acknowledgment of the honor conferred on him and his State in his election. He referred to the many distinguished men who had occupied the position, and dwelt on their brilliant and admirable qualities, which remained with the Association as an inheritance and a treasure. He eloquently set forth the capacity of the Association for grand achievements in the past and present, and the elements upon which reliance was to be placed in working out

the triumphs of the future. He paid an eloquent tribute to Dr. N. S. Davis, the founder of the Association. After a sketch of some prominent members, and of the organization as a whole, he illustrated the devotion of physicians to humanity by their heroic deeds in New Orleans in times of pestilence. This city, once synonymous with disease and death, was now the Mecca, the resort of people from all parts of the world, who had come to survey the wonders of the Exposition. He painted in glowing colors the beauty and majesty of the Crescent City, and expressed his pleasure at being present at such a season. He next spoke of the rationale of the American Medical Association, and drew a comparison between the annual sessions and the Congress of the United States. In the former case, the constituency of the Congress was the medical profession of the United States.

He then said that the publication of the *Journal of the American Medical Association* may now be regarded as an assured and satisfactory success. In its first two most trying and perilous years, the foundation has been laid for an influential and commanding future. It has secured constant communication and comity among the membership of the Association, and it will unquestionably in time become the means of organizing the entire medical profession of the United States. The International Medical Congress in America will bring this Association and the medical profession of the United States in direct and intimate relations, and incorporate us with the scientific organizations and with the advancing and progressive researches of all the foreign nations.

The concluding portion of the Address was devoted to the problem, "The Relations of the Medical Profession to Tribunals of Laws," or as he has heretofore summarized it,

The Doctor in the Courts.

The position of the medical witness and expert testimony before the courts of law is anomalous, and often one of false relation to justice, and sometimes mortifying to the pride and self-respect of the deponent. But few have been so fortunate as to escape the annoying experience of being, at one time or another, the subject of such arraignments. In the eyes of most communities, the plane to which the medical expert has gravitated is but little above that of the ordinary, if not the partizan, witness. From circumstances which condition his testimony, he seldom now occupies in this

country the honorable position of friend and instructor of the court on scientific questions. He is almost invariably presented as the medical witness, or the medical expert, in behalf of one side or the other. He is often selected because he is known to hold opinions, or can be made, on the representation of the attorney, to adopt opinions favorable to the side on which he is to depose. The reliance upon medical testimony and, in time, respect for the medical profession, must necessarily be depreciated by such exponents of them both.

The three principal attitudes in which, as professional men, we most frequently stand related to the tribunals of law, are: first, as the medical witness; secondly, as the medical expert; and thirdly, as a defendant in suits of malpractice. In each one of these relations, the medical man labors under disadvantages which do not, in the same degree, embarrass either the testimony or the defence of any other class of citizens. For the deponent, whether medical witness or expert, the difficulties often arise from the unlimited number and diversity of facts, and sometimes of principles, necessarily used as predicates for medical induction, and from the unavoidable complexity apparently connected with the reasoning by which conclusions, often perfectly legitimate, are arrived at. Thinking in technicalities, he is yet called upon to express himself in the plainest vernacular, often before an ignorant jury, or at least in terms simplified for the ready comprehension of non-professional minds. This last requirement is often violated, from embarrassment and from the little familiarity with, and thought given to questions in forensic medicine, and to the object of medical testimony as being instruction to the jury.

Prussia, recognizing the evil of ignorant and unworthy experts in the profession, from which scientific testimony has to be elicited in grave questions, has a toxicologist appointed by the government, and a permanent commission of experts in matters connected with medical science. In Scotland, medical witnesses deliver their examinations in writing, but are subjected to oral cross-examination before the courts. In France, the judges decide who shall act as experts in certain cases; also what questions shall be submitted to them, the answer being returned to the jury in writing; "and practically it is said to have the weight of conclusive evidence." "In England," continues Professor Washburn, "much speculation and various schemes have been suggested for obviating the objectionable features of expert testimony, but

thus far without adoption of any system." All these efforts, both in the United States and in Europe, comprehend all scientific experts, and among them the medical deponent. They are not made in behalf of the witness, but only to guard against his oft-time ignorance and unworthiness, and and to make his testimony available to the courts.

In most of the European courts mentioned, however, there is an *incidental protection* given to the scientific medical witness from assaults and indignities offered by the examiner and advocate. In the United States, this incidental protection is rarely enjoyed by the medical profession. Often each side calls its medical expert, and his testimony, whether scientific or ignorant, impartial or partizan, is dealt with in open courts by the advocates and examiners, at whatever cost to the witness, so that it can be made only to subserve the interest of one or the other side. Quite often the cause of justice is lost sight of, and the significance of the deposition perverted by the artful methods of the examiners. He is, as a witness and also as an expert, subject to the arbitrary and sometimes offensive and often irrelevant interrogations of the interested attorney, whose duty it may become to misinterpret or suppress the significance of his testimony. In this way can the profoundly scientific and conscientious medical witness or expert, on account of the inherent difficulties of his deposition, more than any other class of witnesses, be made to appear to the average jury in the light of a crafty charlatan—the tool of some hidden interest guiding and directing his testimony.

Among other burdens under which, as a witness, the medical man at present labors, is the *hard lot* imposed by that principle of common law, still existing in most of our States, which declares that the necessary *confidential relations of patients to their medical advisers* are not to be regarded, in the courts, as "privileged communications." It reads thus, in exact legal terms, as quoted by Professor Christopher Johnston, of Baltimore: "Protection is not extended to *medical persons* in regard to information which they have acquired confidentially by attending in their professional characters." (Greenleaf, on *Evidence.*) "The privilege is not accorded to clergymen, although contended for chiefly, if not wholly, in reference to criminal conduct and proceedings"; "Rome punishes the priest who reveals penitential confessions; and Mascardus states that the confession is made, not so much to the priest as to the Deity, whom he represents, and that therefore the priest, when appearing as

a witness in his private character, may lawfully swear that he knows nothing of the subject."

A very different character is here brought to our minds in the person of one of the witnesses in the trial of Queen Caroline. "The trial proceeded, and the first witness was Zoödoro Majocchi, postillion to General Pino. If his evidence in chief was believed, he proved abundantly enough to establish the guilt of the Queen; but he entirely broke down when cross-examined by Mr. Brougham, and to questions respecting matters of which he must have had a lively recollection, the only answer to be obtained from him was '*non mi recordo*,' which passed into the still-continued household words in England for denoting mendacity." ("*The Lives of the Lord Chancellors*," Vol. X, p. 279.)

But neither the conscientious and authorized evasions of the priest, nor the mendacious one of the government-witness, will answer as a refuge for the doctor in the court. He must either betray the most sacred trust upon the assumed existence of which rest all the unquestioning revelations of all his patients, or he must pay the penalty of "contempt of court, by boldly and honorably refusing to appear.

"In regard to *professional* communications, the reason of public policy which excludes them applies *solely* to those between a client and his legal adviser." (*Greenleaf.*) "The foundation of this rule," says Lord Chancellor Brougham, "is not on account of any particular importance which the law attributes to the business of the legal professors, or any particular disposition to afford them protection; but it is out of regard to the interests of justice, which cannot be upholden, and to the administration of justice, which cannot go on without the aid of men skilled in jurisprudence, in the practice of the courts, and in those matters affecting rights and obligations which form the subjects of all judicial proceedings. This 'privilege' extends to all papers or communications; all letters written or entries made by the attorney in his capacity of legal adviser; it extends to all communications made by the client to his attorney, though under a mistaken belief of its being necessary to his case. Every mark or record, of a nature relating to, or for the purpose of professional advice or aid upon the subject of his rights and liabilities, is placed *under the seal* of the law, which, once fixed upon such communications, *remains forever*, unless removed by the party himself in whose favor it was there placed." (*Greenleaf.*)

It is plain, then, that *practically* the private communications from the patient to his medical adviser are the only ones that ever become the subjects of *extorted testimony;* for it is a matter of general knowledge that the devoted members of the Catholic priesthood will welcome fine and imprisonment, and the stake itself, before they would betray one item of penitential revelations made in the confessional. To our honor be it said, in sentiment at least, the medical profession is little or not at all behind them in faithfulness to its sacred trusts. And yet, in some of our States, the hardship is still greater and the penalty more inevitable, perhaps, with the physician than with the priest. As the law now (1878) stands," says Dr. Johnston, "'the medical person' so confided in has no protection in the law. Even if the judge choose to overlook his refusal to appear, the doctor, like any other ordinary witness, may be prosecuted for damages sustained by the party calling him, if it can be shown that by the withholding of testimony the party's interests had suffered." (*Greenleaf.*) In the statutes of some of the States a complete *reversal* of this principle of the common law has been made. At an early period the enlightened State of New York began to manifest a liberal and humane state-craft upon this subject of confidential communications. In June, 1813, DeWitt Clinton, mayor, in the court of general sessions, ruled that "no minister of the gospel or priest of any denomination whatsoever *shall be allowed* to disclose any confessions made to him in his professional character in the course of discipline enjoined by the rules or practices of such denomination." And by the revised statutes, "no person duly authorized to practice medicine or surgery *shall be allowed* to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon"; and by the second revised statutes, "information disclosed to a physician while attending a patient in his professional capacity, which information was necessary to enable him to prescribe for his patient, is declared to be a confidential communication, which the physician is not allowed to divulge without the express consent of the patient, for this is the privilege of the *patient*, and not of the medical adviser." "In Missouri, Michigan, Wisconsin and Iowa, statutes of the same effect have been enacted."

There could be no more seasonable time or opportunity than this to procure in the near future the exact state of the law as regards extorted testimony in the various States.

There are many conditions of professional life in which the *medical man may become a defendant*, either justly or falsely accused. It is, however, in suits for malpractice that the danger and the evil have, in the course of years, grown so unpleasantly familiar to the medical profession. Unavoidable deformities and disabilities remaining after the treatment of fractures and dislocations have been made the most frequent occasions for arraignment of the surgeon; and in complicated cases of fracture the prudent surgeon cannot entirely dispel from his mind this phantom, which may grow into a reality, to destroy his peace and cast a blight upon his reputation and his fortune.

There are certain departments of medical science which apparently have no *special body of facts*, so to speak, which may be regarded as intrinsically their own. They are based, and often very *broadly* too, upon the facts and developments which specially pertain to some other department, and sometimes to many other departments of knowledge and practice growing out of them. The science of sanitary medicine is a department pre-eminently of this kind; hence it could have had no separate existence until after advanced progress had been made in such branches of investigation as those upon which we now find it exclusively based.

Forensic Medicine, in this respect, is just such a department as sanitary medicine. It has no body of facts especially its own; and while it has wide and intimate relations with all the branches of science, it is individually the province of none of them. It depends upon bringing them all, when necessary, into combined relation with law, as sanitation has brought them into combined relation with the public health, and with the hygiene of communities.

As recognized by this Association, the Department of Forensic Medicine should comprehend all the subjects referred to in these several departments; but besides them, every question or occasion through which the medical man can be brought into relation with the tribunals of law. But in the organization and subsequent changes of the sections, medical jurisprudence seems at last to have disappeared as a fully recognized platform for our readings and discussions. None can be of higher importance in the present and the future than the Department of Forensic Medicine.

He would recommend that a committee be appointed to

consider the expediency of organizing, or of rehabilitating a section of forensic medicine.

A vote of thanks was given Dr. Campbell, and his Address was referred to a Committee.

Dr. J. G. Richardson, of New Orleans, read the report of the Committee appointed last year to take action on the *death of Dr. S. D. Gross.* The report was prepared by Dr. Austin Flint, of New York, who was unable to attend this session.

Dr. J. S. Billings, U. S. A., in behalf of Dr. Austin Flint, of New York, presented a report from the Committee to secure a Congressional appropriation for a

FIRE-PROOF BUILDING FOR THE ARMY MEDICAL MUSEUM AND LIBRARY.

Through the efforts of the Committee and the individual aid of the members of the Association, Congress, after having had the subject under consideration for four years, at its last session granted the requisite appropriation for the erection of the building, and the work will be commenced at once. The building will be located on the Smithsonian grounds, near the National Museum, and will be a plain but substantial structure. On behalf of the Surgeon-General, he extended thanks to the Committee and to the Association for their confidence in the present management of the Library and Museum, as shown by their continued and earnest endeavor to secure this appropriation.

Dr. Billings also, in behalf of Dr. Flint, chairman of the Committee appointed at the last meeting to present at Copenhagen "on behalf of the Medical Profession of the United States," an invitation

TO THE INTERNATIONAL MEDICAL CONGRESS

o meet in Washington in 1887, with power, if accepted, to make all necessary arrangements therefor, reported that the invitation had been tendered and accepted; that meetings of the Committee had been held in Copenhagen in August, in New York in October, and in Washington in November, and the result of their preliminary work was stated. He further stated that the Committee expected to be prepared to present a full programme for the Congress at the next meeting of the Association.

Dr. J. M. Keller, of Arkansas, moved that the consideration of the report be made the special order for Wednesday, at 12 o'clock.

Dr. A. L. Gihon, U. S. N., presented, through the Secre-

tary, a report of the committee appointed to consider the advisability of the erection, in the city of Washington, by the Association of a *statue of Dr. Benjamin Rush.* Consideration of the report was made a special order of business for Friday.

The Discovery of Anæsthesia.

The South Carolina Medical Association presented a communication through Dr. R. A. Kinloch, of Charleston, stating that at its meeting in 1884, the following resolution was adopted:

Resolved, That the delegates from this Association be requested to present to the American Medical Association at its next session, the report of the Committee on the Discovery of Sulphuric Ether, made to the Association at its last session, and request that body to take such action on the subject of the report, as they in their judgment may determine in view of the claims therein set forth.

Dr. R. Beverly Cole, of California, remarked that the importance of the resolution rendered it deserving of careful attention, and he moved its reference to the Section on Practice of Medicine with a request for a report. Adopted.

The Association adjourned until 10 A. M. to-morrow.

Second Day—Wednesday, April 29th.

After prayer by Rabbi Gutheim, a telegram of regret at inability to attend was read from Dr. R. O. Baldwin, of Montgomery, Ala., and the Committee on Nominations of Officers, etc., was announced.

Dr. H. D. Didama, of Syracuse, N. Y., Chairman of the Section, delivered the

Address in Medicine.

He first spoke of *Hydrochlorate of Cocaine.* Its anæsthetic properties are so remarkable that its use has been limited mainly to surgery, and especially to operations on the eye. Its power to produce contraction of congested blood-vessels and pallor of the mucosa early suggested its probable utility in various pathological conditions. Used as a collyrium in conjunctivitis, and in the form of spray in acute and chronic nasal and laryngeal catarrh, it has been of greatest service. Speakers and singers afflicted with sudden and even persistent hoarseness and aphonia, have found speedy relief and a restoration of vocal functions. It is not improbable that, used with the atomizer, it may mitigate the severity of the paroxysms of pertussis, and alleviate the dreadful distress of

tubercular laryngitis. Internally it may be found serviceable in gastric irritation and catarrh; and, like the leaves from which it is extracted, it may prove to be a quick and powerful muscular invigorator.

The claim that the *Comma-Bacillus is the pathogenetic factor in cholera* is stoutly denied by some eminent observers. It is asserted, on the one hand, that the comma is not pathognomonic of Asiatic cholera, being found in the dejections of cholera morbus and even in healthy oral secretions; and on the other hand that in many cases of Asiatic cholera it is entirely absent, and that if it happens to be found its presence is a harmless coincidence. Klein and others have demonstrated that the tank water in various parts of India is fairly alive with these punctuating bacilli, and that the natives drink it and them with avidity and impunity. But more extended experiments which excluded former sources of error, have so established the morbific character of this microbe that the affirmation may be made with some assurance:—every tubercle comes from a bacillus. In regard to the comma, Klein, in a recent discussion, admits that while this bacillus in and of itself is harmless, it yet does excrete or produce a virus or poison which causes cholera; so that after all the comma is actually essential to the existence of cholera; and the formula is justified:—no comma bacillus, no cholera.

It is admitted by Klein and his supporters that the poison produced by the bacilli is self-multiplying. Then it must be alive; for a dead excretion has no power of propagation. And if it be alive it must itself be a microbe, the vicious offspring of the amiable comma. But bacteriology, with all its brilliant discoveries, has furnished little help to the art of healing. The fatal march of consumption has not been arrested, and its treatment has not been even modified by the discovery of the bacillus. Its ravages would not cease even if the bacillus could be exterminated; for consumption exists and runs its deadly course where no tubercles are present. No new remedy has been suggested by the discovery of the cholera microbe. It is known that this bacillus thrives in alkaline soils and has its growth and propagation hindered or arrested by acid conditions. Let the spirit of inquiry suffer no discouragement. The helpless and useless babe grows into vigorous manhood in time. Let us labor and wait.

The mycologist is inclined to claim that a legion of diseases arise from micro-organisms. Included among them

are the exanthems, typhus, typhoid, and yellow fevers, diphtheria and mumps, tuberculosis, venereal indiscretions and cholera asphyxia; also complaints like pneumonia, whose contagiousness is not generally admitted, and rheumatic and malarial fevers, which are non-contagious. It is not pretended that the specific *contagium vivum* of every one of these complaints has been demonstrated by propagation experiments.

Fever as a Neurosis.—That a high temperature—the highest recorded—has resulted from injuries of the spinal cord, and where the influence of the microzymes is excluded, is not a matter of question. In one instance, the temperature reached 122° F, and remained for seven weeks between 108° and 118°. The patient was a lady; the result was recovery. An incidental inference is that if recovery can take place after a continuous average temperature of 115° for nearly two months, it is not the fever which kills or produces rapid softening of the heart and other organs in fatal cases of typhoid. Whether there be special calorific nerves which may be stimulated in moderately severe spinal injuries to increased production of heat; or whether, from continuous compression of the nerves, heat is produced by increased resistance (as in the galvano-cautery) are questions which may merit investigation. Fever, so far as it consists in elevation of temperature, can be a simple neurosis.

That *Rheumatism* involves the nervous system, even if it does not originate in it, may be inferred from the erratic behavior of the joint affections in rheumatic fever, and from the causes of arthritis deformans, which are often grief, care, prolonged anxiety, and injury or disease of nervous centres, as shown by Charcot and ably presented by Ord at the last meeting of the British Medical Association. Many *cutaneous affections*—notably *zoster*, *urticaria*, *eczema*—are of nervous origin. *Pneumonia* sometimes arises from injury of the brain. *Diabetes*, both the glucose and the insipid varieties, can be produced by irritating certain nerve centres. Some *kidney* diseases and *liver complaints* are the result of persistent nervous disturbance.

The humoral pathologists still adhere to the belief that our physical ailments arise from *disorders of the blood*. *Plethora* has its numerous attending evils, congestions, hæmorrhages, cardiac disturbances. *Anæmia* is the prolific parent of a thousand aches and pains; of indigestions, palpitations, mental and physical debility. Blood containing an excess of a certain element causes *diabetes;* contaminated with an-

other, it occasions *Bright's* kidney and diseases of the urinary tract. *Rheumatic fever*, with endo- and peri-carditis and permanent valvular disease, is produced by the ingestion or injection of a certain acid, and its absorption into the blood, as shown by the experiments of Richardson and Foster. This acid is produced normally from certain elements of the food. It is transformed before reaching the systemic circulation. Produced in excessive quantity, or failing to be transformed, it poisons the blood—as it does when introduced experimentally—and causes rheumatic joint affections and cardiac lesions. As is well known, these *endocardial disturbances* and valvular injuries are limited almost exclusively to the left heart. The right heart escapes because the acid is normally present there, and is an accustomed stimulant. The transformation is effected in the lungs. In failure of this transformation, the acid passes into the general circulation, and being an unaccustomed stimulant poisons the left heart and works its well known mischief. Many dermatologists believe that certain cutaneous affections are caused by impure blood; eczema is one. The solidists pin their faith to cellular pathology. Neither of the views is exclusively true; neither is wholly false. Living foreign organisms, the nervous system, effete impurities of the blood, disorder of the minute cells of which every part of the human frame is constructed—each of these may be a factor in the origination of disease; each may be first or midway, or last in the vicious circle of causes.

Germs may develop a countless brood and contaminate the blood, either by their own abnormal presence or by a poison which they exude. This poisoned blood stimulates or obstructs the nervous system, and the heat of fever is developed by the correlation of forces. The presence of certain microbes is made known to the nervous centres. A mandate is sent to the vaso-dilators of the lung; congestion and *pneumonitis* result. Some irritation at the origin of the vagus produces hyperæmia of the liver, over production of sugar, impairment of the transforming power, disturbance of the kidney, and *diabetes*. From disordered digestion an abnormal condition of the blood may result; the nervous system may become involved; *gout* may be a product, sometimes appearing in its true character as a torturing joint affliction, and sometimes masquerading as eczema or asthma.

Without the aid of the nervous system there could be no fever. But the nervous system alone can never originate any specific fever, typhoid or rheumatism, or pneumonia.

Rheumatism is intimately associated with a poison in the blood; but the excessive production of the poison and its circulation in unwonted vessels are the result of abnormal nervous influence.

From the ovum to the cadaver man is constantly exposed to this conspiracy of morbific influences and agents to destroy him. There are foes without and foes within. To counteract these ruinous influences and agents many means of defence and attack are provided. We are familiar with the *vis medicatrix naturæ*. This reparative power is the best friend and ally of the wise physician. It may be too weak to accomplish its purpose, and so may need timely and sufficient aid. It may overdo the matter, and so need wholesome restraint. It may be irregular in its action, and so need careful guidance.

Now while we are familiar with this reparative power, we may not be so attentive to another conservative force which is especially important—the resisting power. This is the *vis medicatrix*. This resisting power is akin to what is called inertia in physics. Every human being has more or less of this resisting power by virtue of which he seems to be composed, till all his acquaintances have passed off the stage of action. On the other hand, this resisting power may be like that of the granite. Its owner may violate all sanitary laws and yet remain a standing refutation—as superficial observers think—of all rules for preserving good health. But when some overwhelming calamity comes they are stricken down forever; their first illness is their final one; they crumble to atoms. And again, in every community there are those whose resisting power is so feeble from inheritance or so thoroughly impaired by excesses that they are but walking dead men. The good constitution—the strong resisting power of the temperate and upright man is not only a sure defence against diseases and a guaranty of longevity; it is transmitted to his offspring down to many generations. The dissolute man, broken down with diseases acquired while sowing his wild oats, suffers not alone. The evil that he does lives after him in the blighted and wretched lives of his innocent offspring.

Dr. R. Stansbury Sutton, of Pittsburg, Pa., Chairman of the Section delivered the

Address in Obstetrics.

He stated that the principal subject of his address would be "*A Brief Review of the Growth of McDowell's Operation*

done at Danville, Ky., in 1809. *Its Present Status.* In December, 1809, a woman riding on horseback, arrived in Danville, Ky. She had just completed a journey of sixty miles that she might be near a surgeon, who had promised to open her abdomen, and attempt to open the large ovarian cyst it contained. She was to be the subject of an experiment which would involve her life, and to which she must submit without chloroform or ether. This woman was Mrs. Crawford. She recovered and lived to the advanced age of seventy-nine years, a period of thirty years beyond the operation.

I ask you to listen thoughtfully, and inquire of yourselves: Have modern operators had better environment than McDowell? Is their quarantine better than his was? Dr. Sutton hopes to show that McDowell did operate under conditions as favorable as does Dr. Keith or Mr. Lawson Tait.

1st. The patient was refused operation in her own home.

2d. She was operated upon in Dr. McDowell's own house.

3d. History mentions but one assistant present at the operation.

4th. The patient had never been tapped.

5th. We may safely infer that the room in which the operation was performed contained, at this early date in Kentucky, no superabundance of furniture or upholstery.

6th. That the room was ventilated by an open fireplace is more than probable.

7th. The atmosphere was that of a healthy border town.

8th. No sponges were introduced into the abdomen.

9th. He ligated the pedicle and dropped it in.

This operation will stand the criticism of the most exacting specialist of the year 1885, save in two particulars, viz.: the ligature was not carbolized or scalded; and the ends of it were left hanging out of the lower angle of the wound, and merely turning the woman on her side to permit all fluids to escape from the cavity of the abdomen was scarcely enough in that direction. The incision was made to the left of the rectus muscle, but in his next case McDowell made it in the linea alba, between the umbilicus and pubis. At the end of almost three-quarters of a century, the operation stands almost where McDowell left it, with one solitary exception, viz.: the ends of the ligature surrounding the pedicle are cut short.

For eleven years the operation remained in the hands of McDowell, and he adhered to ligation of the pedicle, leaving the ends of his ligature hanging out at the lower angle

of the wound. In 1820, Crysmar, of Würtemburg, tied the pedicle in two portions, leaving the ends of the ligature hanging out at the lower angle of the wound. In 1821, Nathan Smith, of New England, tied the pedicle with "strips cut from a kid glove;" he cut the ligature off close to the knots, and dropped the pedicle into the abdominal cavity. Neither Crysmar nor Nathan Smith knew anything of McDowell's operations. Dr. McDowell sent to Mr. John Bell, of Edinburgh, an account of his cases. Mr. Bell being then in Italy, his colleague, Mr. Lizars, received the report. It is probable this record was received in 1818. For six years Mr. Lizars kept it to himself. He attempted ovariotomy four times, and succeeded in one case, the patient surviving the operation seventy days. In one case he opened the abdomen by an incision reaching almost from the ensiform to the pubis, and thrust his hand into an empty belly. He requested every one of his students to put his hand into the abdomen. Mr. Lizars then closed the wound, *and it healed by first intention.*

Owing to the fact that Mr. Lizar's results were bad, twenty years elapsed before ovariotomy was again attempted in Scotland. In 1845, Dr. Handyside performed it. Another halt of seventeen years occurred, bringing us up to 1862, at which date but one success had been attained in Scotland. In that year Dr. Thomas Keith did his first operation.

Up to 1843, I find the records of only eighteen completed ovariotomies in America. In this year, Dr. Alexander Dunlap, of Springfield, Ohio, and Dr. John L. Atlee, of Lancaster, Pa., did their first cases, the latter removing both ovaries. Eleven years later (1855), Dr. Kimball, of Lowell, began operating. These three are now the only living pioneers. It is estimated by Peaslee that up to the last quarter of 1863, over three hundred ovariotomies had been done in this country. At this date, Dr. Keith was only beginning in Scotland; the operation was performed for the first time in Russia, and was only a year old in Italy. Twenty years after the death of Dr. McDowell, in 1842, Dr. Charles Clay, of Birmingham, England, did the first operation in that country; prior to this time, Jeaffreson, Walne, King and West had each removed, by abdominal section, parovarian cysts. In 1851, Baker Brown began operating in St. Mary's Hospital, London; his results were not good, and the intense opposition of his colleagues drove him from the hospital; he then founded "The London Surgical Home," where his results compared favorably with those of any other surgeon

of his time. It was mainly due to his action that the practice of performing ovariotomies in large hospitals, where isolation is impossible, ceased.

From Baker Brown, Nélaton learned the operation. Through the influence of Brown on Nélaton, the opposition to ovariotomy in France was largely diminished. In 1854, Baker Brown taught Sir Spencer Wells the operation, and in 1857 Sir Spencer did his first operation. In 1864, the operation was completely established in London, and, we may add, in every country in the civilized world.

But there was a diversity of opinion with regard to the *treatment of the pedicle.* From Dr. McDowell's first operation up to 1821, the ends of the ligature were brought out at the lower angle of the wound; Dr. Nathan Smith was the first to cut the ends off. For sixteen years afterwards no other method was offered. In 1837, Stilling, of Cassel, Germany, used the cautery, and suggested stitching the pedicle to the wound. In 1846, Dr. Handyside, of Edinburgh, Scotland, carried the ligatures through the cul-de-sac of Douglas into the vagina. In 1848, Stilling treated the pedicle outside of the peritoneal cavity. Two years later this method was inaugurated in London by Mr. E. W. Duffin. The introduction of the extra-peritoneal method of treating the pedicle by Stilling, in 1848, began a long and serious conflict which has happily died out with the method. Maisonneuve, of Paris, in 1849, had twisted the entire pedicle in one case, and Martin, of Jena, had stitched the pedicle to the wound. About this time Langenbeck stitched the pedicle to the wound, and covered it with skin from the margin of the incision. Eight years later, Dr. John L. Atlee introduced the écraseur to divide the pedicle. He was imitated by a number of operators, notably by his brother, the late Washington L. Atlee, Sir Spencer Wells, Dr. Keith, Prof. Pope, of St. Louis, and Prof. Bilroth, of Vienna. During this year, Mr. Jonathan Hutchinson invented the clamp, which perpetuated the extra-peritoneal mode of treating the pedicle. In 1860, Sir James Y. Simpson secured the pedicle within the cavity of the abdomen by acupressure needles passed through the abdominal wall. About 1865, Koeberle, of Strasburg, invented the serre-nœud, or wire-constrictor, with which he grooved the pedicle prior to applying the ligature.

In 1864, Mr. I Baker Brown, of London, reverting to Stilling, of Cassel, established the use of the cautery—a method rejected in London, taken up by Dr. Keith, and now

credited through him with the best statistics yet attained by any operator. In 1868, Masslovsky, a Russian, amputated the pedicle by double flaps, one on each side, and stitched the flaps together. In 1869, Dr. McLeod, of Glasgow, Scotland, by means of two pairs of strong forceps, twisted the pedicle entirely off. During this year, Dr. Peaslee invented a scabbard and knife by means of which the pedicle was secured, the ligature traversing the scabbard. After forty-eight hours the ligature was cut by introducing the knife into the scabbard, when both ligature and scabbard were withdrawn. In 1870, Dr. Thomas Addis Emmet reported eighteen cases in which he had secured the pedicle by means of silver wire.

Up to the present year (1885), every conceivable thing has been done with the pedicle. It has been tied entire; tied in sections; been twisted off; burnt off; crushed off; cut square off; cut off in flaps; left inside; left outside, and made to slough off. The extra-peritoneal method of treating the pedicle is gone. The question is now resolved into the merits of the ligature cut short, the Dr. Nathan Smith method, or the clamp cautery, as introduced by Mr. I. Baker Brown, of London, in 1864. Recently ligation and the cautery have given almost equal results. The operation of Dr. McDowell, in so far as it relates to the treatment of the pedicle, is, therefore, triumphantly where he placed it, despite the ingenuity of the surgical world, having undergone but a single alteration, namely, Dr. Nathan Smith's improvement of cutting the ligature short. When Dr. Keith was about to do his first operation, he had the water to be used boiled the night before, and he made everything scrupulously clean. After removal of the cyst, he thrust a big sponge into the abdomen, and brought it out full of fluid. As he was about to repeat this, one of the doctors seized his arm, and exclaimed, "For God's sake don't do that again." When he hesitated, the others argued that any fluid left in the body would be a nice protection to the intestines. He closed the wound. Subsequently the patient did badly. He at once opened the wound and let out a pint of dirty fluid, and the patient recovered. From that time he advised careful sponging after the operation, and he was the first to insert a flat sponge under the wound while the stitches were being placed. Koeberle, who also began to operate in 1862, introduced the compression forceps and drainage, first by short and later by long glass tubes.

The technique of McDowell's operation is, probably, com-

plete, *and its future will depend on the subject, the place of application, and the care taken to protect the patient from extraneous sources of danger.* The principles apply to hysterectomy for fibroids, hepatomy, cholecystotomy, normal ovariotomy, the Hegar-Tait operation for the removal of both ovaries and tubes, nephrectomy, exploratory incisions, gastrotomy, and enterotomy.

Mr. Thornton has been successful in gastrotomy for the removal of a large foreign body, and has had seventeen successful cases of nephritic surgery, ten of these being nephrectomy by abdominal section. Drs. Keith and Bantock continue to do supravaginal hysterectomy with unparalleled success. They both adhere to the extraperitoneal treatment of the stump, while the continentals practice the intraperitoneal method. Mr. Lawson Tait has given a great impetus to the Hegar-Tait operation for the removal of diseased tubes, and for the removal of ovaries and tubes for the cure of fibroids of the uterus.

Ovariotomy and its offshoots comprise almost, if not the entire field of abdominal surgery. The establishment of the parent operation brought out the others, and established them after they had been practically abandoned.

The carbolic spray is still a matter of dispute. In Great Britain, Mr. Thornton adheres to it of old; Drs. Keith and Bantock and Mr. Tait will have none of it. The latter said to me, "I sold out all my right, title and interest in Listerism, with my tea-kettle, to Battey." So far as I know, the best statistics yet obtained in ovariotomy in the United States belong to Dr. Battey, of Georgia, and Dr. John Homans, of Boston, Mass., both of whom operate under the carbolic spray, and in apartments kept especially for abdominal operations. I make special mention of this fact for the reason that Dr. Emmet says in his last edition, p. 715, "I do not know of any prominent operator in this country who now uses the spray"—evidently an oversight. I do not use the spray myself, but look upon the entire Lister system, less the spray, as firmly grounded in the surgical mind. Cleanliness and Listerism can never be separated, for "Listerism is the gospel of cleanliness;" without the latter you cannot have the former.

The year has wrapped up in its eternal folds one whose name is synonymous with the surgery of women; one whose reputation is immortal, who in America at least, stood next to McDowell; beloved by his own countrymen, honored by the entire surgical world. No eulogy of mine can increase

his fame. I speak of *the great, the good, the pure, the noble, the generous* Marion Sims. Like McDowell, he possessed a genius for origination, and will share with him the admiration and plaudits of future generations.

Dr. W. C. Van Bibber, of Baltimore, Md., read in part a paper on

PENINSULAR AND SUB-PENINSULAR AIR AND CLIMATE.

His object was to give information as to winter resorts for invalids. Where should a place be built for the sick? He referred to Florida as one of the six principal peninsulars of the world, and compared its climate to that of Spain, Italy, Portugal, and France. Florida, however, was superior to all the others, and the author proceeded to give an elaborate description of the features of the State. The physicians of Florida often asked why their brethren of the North sent patients there in the advanced stage of phthisis. The answer was that the patients went there of their own accord, for they had observed that even in that stage the progress of the diseases was sometimes arrested by the action of the Florida climate. But Florida would never be complete as a health resort without a hygienic city built in the sub-peninsular portion of the State.

The special order in regard to the

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being then in order, Dr. John V. Shoemaker, of Philadelphia, protested against the acceptance of the report, and stated that the American delegates who were present at Copenhagen had been entirely ignored by the Committee. He declared that the Committee had recognized the New Code men. He asked whether the Association had authorized this Committee to elect officers for the Congress. The members of this Committee had ignored the Association, and they have made fun of it for the last ten or twelve years. He asked what was meant by the statement that a complete programme would be presented at the next meeting? It meant the Councils of the Sections would be filled by a clique.

Dr. F. E. Daniel, of Fort Worth, Texas, offered the following preamble and resolution:

Whereas, At the last meeting of the American Medical Association a committee was appointed to confer with the International Medical Congress, at Copenhagen, with a view to securing the next meeting of that body, in 1887, at Washington, and to arrange for the said meeting; and

Whereas, This Committee, after accomplishing this object,

have proceeded, without authority from this body, to appoint the officers of the Congress, which have been published in detail in the *Journal* of the Association and other publications, thus giving the aspect of authoritative action on behalf of this Association; and

Whereas, This Association recognizes the Committee as a Committee of Arrangements only, and in so far as the duties of the Committee have been performed, it declines to endorse the said appointments; therefore,

Resolved, That the Committee on Nominations be instructed to prepare and present to the Association nominations for the officers of the Congress and its various Sections.

Dr. J. S. Billings, U. S. A., denied *in toto* Dr. Shoemaker's statement that any bargaining was had with any one. No New Code men were consulted by the Committee, unless Dr. Moore, of Rochester, could be considered a New Code man. He called attention to the resolution of last year which appointed the Committee, and gave it the power, if the invitation was accepted, to add to its membership, to perfect its organization, to elect its officers, and to act as an Executive Committee, with full power to make all necessary and suitable arrangements for the meeting, and to solicit funds for this purpose. This committee, which consisted of Drs. Austin Flint, of New York; H. F. Campbell, of Georgia; L. A. Sayre, of New York; I. Minnis Hays, of Philadelphia; Christopher Johnston, of Baltimore; George J. Engleman, of St. Louis; J. M. Browne, U. S. N., and J. S. Billings, U. S. A., presented the invitation at Copenhagen, and, upon its acceptance, were constituted the Organizing Committee of the Congress. This Committee, under the power given it, enlarged its number to twenty-five, so that it should be representative of every section of the country. It then proceeded with the necessary preliminary work for the organization of the Congress, which was done, thus early, in accordance with the advice of the Committee of Arrangements of both the London and Copenhagen Congresses. The Committee had acted to the best of its ability and with honest motives. He hoped that no hasty action would be taken to overthrow the reported work of the Committee, because such action would cause an unfortunate delay in the organization of the Congress, and was calculated to create an unfavorable impression abroad.

Dr. J. F. Gabriel, of Piqua, Ohio, complained that the American delegates had not been consulted at Copenhagen by the Committee.

Dr. J. M. Keller, of Hot Springs, Arkansas, considered that the Committee was responsible to the Association for its action, and had overlooked its responsibility. He offered the following amendment to Dr. Daniel's motion:

Resolved, That the committee appointed by the American Medical Association to arrange for the meeting of the International Medical Congress in 1887 be enlarged by the addition of members from this Association, one from each State and Territory, and from the Army and Navy, and Marine-Hospital Service, and the District of Columbia, to be appointed by the present presiding officer, Dr. J. S. Lynch, of Baltimore, first vice-president, and that this committee thus enlarged shall proceed to review, alter, and amend the action of the present committee as it may deem best.

Dr. Cole, of California, seconded the resolution, and said that the committee had erred, though probably not intentionally. He was strongly opposed to the exaltation of New Code men.

Dr. Willis P. King, of Sedalia, Mo., said that he could not doubt the honesty of the members of the committee, but they had entirely neglected the West and South and had only considered the North and East.

Dr. Shoemaker repeated that the New Code men had made threats at Copenhagen.

Dr. Daniel said that Texas had been ignored in the composition of the committee.

Dr. D. D. Saunders, of Memphis, Tenn., moved as an amendment that the report of the committee be accepted and the committee continued.

Dr. J. B. Roberts, of Philadelphia, said it would be better to endorse the action of the committee than to publish the dissensions that exist at home.

A motion to adjourn was lost, 44 to 360. Dr. Saunders's resolution was lost, 88 to 129. Dr. Keller's substitute was adopted.

Third Day—Thursday, April 30th.

Manner of Electing Officers of Sections.

Dr. W. W. Potter, of Buffalo, moved that Dr. Foster Pratt's motion, offered last year, to so amend the by-laws as to allow each section to elect its own officers, be now taken up.

Dr. C. J. Lundy, of Detroit, said that to adopt this amendment would destroy harmony, and split the Association into small bodies.

Dr. N. S. Davis, of Chicago, thought that this proposition should not be adopted. The only objection to the present method of choosing the officers, by the Nominating Committee, was that the committee had sometimes appointed men as officers of sections who had not worked two years consecutively in them. The amendment was premature. The Nominating Committee should be more careful. He moved as an amendment that the matter be postponed for one year. Carried.

Report on Meteorological Conditions and their Relations to the Prevalence of Disease.

Dr. N. S. Davis read the report. The Superintendent of the Signal Service Bureau had kindly given information of meteorological observations in seventy two cities for the year 1884. The committee had advised their observers to inquire into the geographical distribution of diseases, their prevalence in certain places, and their ætiological factors in other respects.

Collective Investigation of Diseases.

Dr. Davis said that an international committee sitting in London, representing Denmark, Norway, India, Ireland, Great Britain, Hungary, Switzerland, and the South American and various other countries, had appointed an international sub-committee to decide upon the subjects to be investigated, so that each country would have the same subject to discuss, and harmony would prevail in its discussion. His name had been placed on the international sub-committee, and he would now report that the committee recommended that State societies be urged to take action in the matter. Illinois had done something in this direction for the past two years, and so had Pennsylvania.

Code of Ethics.

Dr. Davis also made a report in behalf of the special committee appointed at the last meeting to consider certain suggestions that had been made in the annual address of the President (Dr. Austin Flint, Sr.), as to the advisability of giving an authoritative exposition of some of the features in the Code that seemed to have been misunderstood. The committee respectfully submitted its report in the form of the following preamble and resolutions:

Whereas, Persistent misrepresentations have been and are still being made concerning certain provisions of the Code of Ethics of this Association, by which many in the community,

and some even in the ranks of the profession, are led to believe that these provisions exclude persons from professional recognition simply because of differences of opinions or doctrines; therefore be it

"*Resolved*, That clause 1, Art. IV, in the National Code of Medical Ethics is not to be interpreted as excluding from professional fellowship on the ground of differences in doctrine or belief those who in other respects are entitled to be members of the regular medical profession. Neither is there any other article or clause of the said Code of Ethics that interferes with the exercise of the most perfect liberty of individual opinion and practice.

"*Resolved*, That a voluntary disconnection or withdrawal from the medical profession proper is constituted by indicating to the public a sectarian or exclusive system of practice, or by belonging to an association or party antagonistic to the general medical profession.

"*Resolved*, That there is no provision in the Code of Medical Ethics in any way inconsistent with the broadest dictates of humanity; and the article which relates to consultations cannot be correctly interpreted as interdicting under any circumstances the rendering of professional services whenever there is a pressing or immediate need of them. On the contrary, to promptly meet the emergencies occasioned by disease or accident, or to give a helping hand to the distressed without unnecessary delay, is a duty fully enjoined on every member of the profession, by both the letter and the spirit of the entire Code; but no such emergencies or circumstances can make it proper to enter into professional consultation with those who have voluntarily disconnected themselves from the regular medical profession in the manner indicated by the preceding resolution."

The report, which was signed by N. S. Davis, A. Y. P. Garnett, H. F. Campbell, Austin Flint, and J. B. Murdock, was unanimously adopted.

Address in Anatomy and Surgery.

Dr. Duncan Eve, of Nashville, chairman of the Section in Surgery and Anatomy, then gave the address. Attention was called to the improvements that had been made in surgery in the nineteenth century, and the principal operations were reviewed, among which was a novel procedure by Professor Henry B. Sands for œsophagotomy. Reference was made to a case of lumbar colotomy in which death ensued one hundred and thirty-seven days after the operation.

Operations for facial neuralgia and the procedure of cholecystotomy were then referred to; also the removal of calculi impacted in the urethra, the use of the woven-wire corset, the reduction of a dislocation of the seventh cervical vertebra, without fracture, thirty-six hours after the injury, and recent advances in the treatment of wounds. The speaker then mentioned some of the more important contributions that had been made to the literature of surgery during the year, and closed with a touching allusion to the late Dr. Gross. The address was ordered to be printed.

The Treasurer's Report showed a balance of $932.11 in the treasury; $17,093.26 had been paid in during the second year of the publication of the *Journal*, to the subscription list of which 125 names had been added during the year.

The Report of the Committee on Publication was read by Dr. J. M. Toner. The "Journal year" dated from the 1st of July; therefore the report embraced the last quarter of the first year and the first, second, and third quarters of the second year. After setting forth the committee's high appreciation of the services of the editor, the committee now announced, at the close of the second year, that the *Journal* was free from debt, and promised soon to be the foremost in the land. The number of subscribers at the close of this, the third quarter of the second year, was thirty-nine hundred. One hundred and twenty copies were required for exchanges. The total income was over $21,000. The cost of publishing, including the editor's salary, was $12,021.20. The committee had promised aid to the editor, and recommended that the publication should continue to be made in Chicago. They had unanimously requested Dr. Davis to continue as editor. Dr. Davis had replied that he would accept the superintendence of the *Journal* for another year. This great body needed an organ commensurate with its great reputation, and yet it should be kept clear from debt. In ten years the *Journal* would compare favorably with any association journal in the world. There would be money enough in the treasury, besides, to carry on any investigation that might be designated. On motion of Dr. Quimby, the report was accepted, and a vote of thanks tendered to the editor.

Prizes.

Dr. R. H. Reid, of Ohio, offered the following:

"*Whereas*, There is not sufficient stimulus offered by the Association for original research, therefore be it

"*Resolved*, That a first and second prize be offered for the

best and second best papers showing original research in each Section at the next meeting of the Association; that three judges shall be appointed, no two of whom shall be from any one State, to judge of the merits of said papers; and that no paper shall occupy over thirty minutes in its reading."

Dr. Reid said that it was not intended to renew the prize system. The resolution was carried.

Rush Monument.

The committee on the erection of a monument to Dr. Benjamin Rush submitted its report, including a short biographical sketch of Dr. Rush. The report closed with a resolution that the Association erect the monument. The fund should be raised by dollar subscriptions among physicians and medical students. Adopted.

The Committee on Forensic Medicine was announced as follows: Drs. Isaac N. Quimby, of New Jersey; X. C. Scott, of Ohio; F. E. Daniel, of Texas; J. V. Shoemaker, of Pennsylvania; Eugene Foster and H. F. Campbell, of Georgia.

Officers for the Ensuing Year.

The Committee on Nominations reported as follows: For President, Dr. William Brodie, of Michigan; for Vice-Presidents, Drs. Samuel Logan, of Louisiana; A. Y. P. Garnett, District of Columbia; Charles Alexander, of Wisconsin; G. W. Peck, of Iowa; for Permanent Secretary, Dr. W. B. Atkinson, of Pennsylvania; Assistant Secretary and Treasurer, Dr. R. J. Dunglison; Librarian, Dr. C. H. A. Kleinschmidt, District of Columbia.

Sections.—*Practice of Medicine*—Chairman, Drs. J. T. Whitaker, of Ohio; secretary, B. L. Coleman, of Kentucky. *Obstetrics and Diseases of Women*—Chairman, S. C. Gordon, of Maine; secretary, J. F. Y. Paine, of Texas. *Surgery and Anatomy*—Chairman, N. Senn, of Wisconsin; secretary, H. M. Mudd, of Missouri. *Ophthalmology, Otology and Laryngology*—Chairman, Eugene Smith, of Michigan; secretary, J. Fulton, of Minnesota. *Diseases of Children*—Chairman, W. D. H. Ager, of Tennessee; secretary, W. B. Lawrence, of Arkansas. *Oral and Dental Surgery*—Chairman, J. Marshall, of Illinois; secretary, A. E. Baldwin, of Illinois. *State Medicine*—Chairman, J. H. Rauch, of Illinois; secretary, F. E. Daniel, of Texas. *Committee on Necrology*—J. M. Toner, of the District of Columbia. *Judicial Council*—R. A. Kinloch, of South Carolina; D. D. Sanders, of Tennessee; T. G. Richardson, of Louisiana; G. A. Ketchum, of Alabama;

George Beard, of West Virginia; J. M. Toner, of the District of Columbia; and A. M. Pollock, of Pennsylvania.

The next meeting to be held in St. Louis, the first Tuesday in May, 1886.

Fourth Day—Friday, May 1st.

The Section on State Medicine presented the following:

Resolved, That the Section on State Medicine heartily recommends the appointment in each State of a State Board of Medical Examiners and Licensers.

Resolved, That the Committee appointed by the Association shall construct and forward to each State Society the form of a bill, the passage of which by the Legislatures these Societies shall be requested to urge strongly.

Dr. Keller, of Arkansas, asked that his resolution on *Cremation*, offered three years ago, be now taken from the table and considered. Referred to a special committee to report next year.

The Nominating Committee reported the following nominations:

Trustees of the Journal.—Drs. J. M. Toner, of Washington; J. H. Hollister, of Chicago; E. M. Moore, of Rochester, N. Y.

Committee of Arrangements.—Dr. Legrand Atwood, of St. Louis, chairman.

Judicial Council (to fill vacancy occasioned by the death of Dr. Brodie.—J. K. Bartlett, of Wisconsin. Adopted.

Address in Ophthalmology, Otology and Laryngology, was read by Dr. J. A. White, of Virginia. After referring to the difficulties of reviewing, in a proper manner, the advancements that have been made in any single branch of the medical sciences, he gave a critical review of the ophthalmological work of the past year; notably, the efforts made for the improvement in the treatment of detached retina. He also recommended the substitution of enucleation by evisceratio bulbi, which was originated by Dr. Henry D. Noyes, of New York, but was comparatively unknown until Alfred von Graefe brought it prominently forward. The important work of Landolt in determining the converging power; the improved indications for the use of jequirity; and the value and application of cocaine, with an explanation of its physiological action, all received due attention. The main consideration of the paper was the reflex neuroses of the nose, such as reflex cough, sick headache, hay asthma, etc., in which,

with a full review of the present aspect of that question, the author produced facts, in many instances somewhat at variance with the idea that engorgement of the nasal mucosa is essential to the production of the reflex phenomena.

Dr. J. H. Pope, of Texas, delivered the

Address in Diseases of Children.

He said that there have been no special advances in the department, unless it be in the improvements in certain methods of treatment, and in remedies. A good many so-called specific remedies have been introduced, and their value cannot be determined at so recent a date. Among other advances has been the use of disinfectants. Notably among these is the bichloride of mercury. Dr. J. Lewis Smith, of New York, has called especial attention to his results from its use in diphtheria. Some of the cases which he has reported are remarkable. In some of them tracheotomy appeared almost unavoidable, but by the persistent use of bichloride of mercury the dangerous symptoms were averted. As regards the pathology and etiology of children's diseases, there cannot be said to have been any advance. He, however, stated that in his experience a new view of the causation of rickets could be advanced. He had observed that it occurred more frequently in children who were nourished at the breast until long after the proper time for weaning than in any other class. Too long nursing, then, was one of the most frequent causes of the affection. He expressed, in conclusion, strong regret that the Section on Diseases of Children is not better attended at all the meetings. This fault was not perhaps so patent at this meeting as at a number of previous ones, when compared with the attendance, but there was still not the number present that should have been.

The Address on Oral and Dental Surgery was read by title, the author, Dr. W. W. Allport, of Illinois, being absent.

Report of the Committee on Necrology.—Dr. J. M. Toner, the chairman, stated that since the establishment of the *Journal* he had reported promptly through it all the deaths of members. He asked that the members of the Committee on Necrology, in each of the States, should report promptly either to him or to the editor of the *Journal* all deaths of members as they occur.

Dr. Eugene Smith, of Michigan, stated that at the last meeting of the Association a resolution was offered by Dr. Seiler, of Philadelphia, providing for the division of the Section on Ophthalmology, Otology, Laryngology and Rhino-

scopy, into two separate bodies, one to be known as the Section on Ophthalmology, the other as the Section on Otology, Laryngology, etc., and moved that it be now taken up for action. The motion being carried, Dr. Smith moved that it be permanently tabled, such a division being clearly inexpedient and unnecessary. The motion was unanimously carried.

A motion was then made to take up the remaining resolutions laid on the table at the last meeting.

Dr. Von Klein's (Ohio) resolution providing for the requirement of a *higher education in order to become members of the American Medical Association*, and other requirements intended to elevate the standing of the profession, was then called up.

The Secretary stated that a letter had been received from Dr. Von Klein, requesting that his resolution be laid on the table for another year. It was the opinion of the Association that they could be acted upon at once, and they were tabled indefinitely.

The resolution of Dr. Cochran, of Alabama, that it is the sense of the Association that it is not expedient for the members of the Nominating Committee to nominate any of its own members to offices of the Association, was taken up and discussed at length and finally laid on the table.

Votes of thanks were tendered.

Dr. M. H. Henry was announced as a delegate to the British Medical Association, and it was further resolved that other members desiring to become delegates could be elected by the vote of the President and Permanent Secretary.

The President-elect, Dr. Brodie, was then introduced, and accepted the trust in a few words of appreciation of the favor.

The retiring President, Dr. Campbell, thanked the Association for their consideration and assistance during the session just ended.

Adjourned.

PROCEEDINGS OF SECTIONS.

PRACTICE OF MEDICINE.

First Day—*Tuesday.*—Dr. H. D. Didama, of Syracuse, N. Y., Chairman.

Treatment of Carbuncle without Incision.

Dr. L. Duncan Bulkley, of New York, as a text for his

article, reported the case of a man fifty-six years of age, who had a carbuncle upon the back of his neck. During its development this carbuncle reached the size of four inches in diameter, and the case was complicated by the presence of glycosuria.

℞. Magnesiæ sulphatis.....ʒvj
Ferri sulphat.....ʒj
Acidi sulph. dil.....ʒiij
Syr. zingib.....ʒj
Aquæ, *ad*.....ʒiij

Locally. No poultices were allowed, but the following mixture was spread thickly on the woolly side of lint and applied to the inflamed part:

℞. Ext. Ergotæ fl.....ʒij
Unguent. aquæ rosæ.....ʒij
Zinci oxidi.....ʒj

This dressing was to be renewed twice daily, or oftener if there was much discomfort. The patient was allowed to attend to his business, which he did without much complaint. From the beginning of the treatment the pain and soreness of the carbuncle began to diminish, although the tumor itself increased in size.

This constituted the whole of Dr. Bulkley's treatment. The points which he attains by this method are: the careful avoidance of unnecessary irritation to the inflamed surface; the avoidance of all warm and moist applications, such as poultices, which he thinks increase discomfort; the avoidance of painful surgical proceedings; the perfect protection of the inflamed part by a soothing ointment, which is always gratefully acknowledged by the patient. The system is sustained, not by stimulant, food and medicine, but by securing a healthy performance of the functions of the system with nutritious and healthful food and fresh air. He has employed this treatment in many cases, and the advantages which are observed to follow it are: (1) A comparatively short duration of the entire process. (2) A comparatively small amount of pain. (3) A comparatively small amount of scarring. (4) The avoidance of a surgical operation. (5) The avoidance of detention in bed.

Dr. James F. Hibberd, of Richmond, Ind., cordially indorsed the suggestion of the paper. He had long abandoned the use of crucial or other incisions for carbuncles, nor did he employ poultices unless driven to it by the interference of friends. During the last year he has treated carbuncles by the gentle inunction of oleate of morphine applied every

three hours. He reported several cases where this plan of treatment had not only diminished the sensitiveness of the swelling, but had also apparently aborted the disease. The carbuncle ceased to develop, diminished rapidly in size, and disappeared. Dr. H. had not accumulated a large enough number of cases to make any definite assertions as to the infallibility of the remedy, but it had appeared to work in a wonderful manner.

Dr. Lynch, of Baltimore, indorsed Dr. Bulkley's plan, but applied dilute citrine ointment.

Dr. Shoemaker, of Philadelphia, does not incise carbuncles unless there is a considerable quantity of pus. He does not get good results from oleates, but indorses Dr. Bulkley's plan.

Dr. Savage, of Jacksonville, Tenn., paints a zone of cantharidal collodion, from one-half to an inch in width, around every carbuncle. A blister is formed, and the result is great relief from pain and a relatively comfortable progress of the disease.

Dr. Bulkley said he never opens a carbuncle, even at an advanced stage, when its contents are liquid, as shown by fluctuation. Nature provides a way for the safe discharge of the pus, whereas an incision exposes the patient to the possibilities of absorption and subsequent danger.

The second paper was by Dr. Asa F. Pattee, of Boston, Mass., on the *Percuteur: Its use in Diseases of the Nervous System.* It consisted of a *résumé* of Dr. J. Mortimer Granville's book on "Nerve Vibration and Excitation," with notes upon cases from his own practice. Dr. Pattee exhibited a percuteur which he had had constructed for his own use, and in which he employed electricity as the motive force for the hammer.

Hydatid Tumor of the Brain.

Dr. R. Harvey Reed, of Mansfield, Ohio, stated that hydatid cysts are caused by either the echinococcus or the cysticercus cellulosa. The former are the embryo of the tænia echinococcus and the latter of the tænia solium. Then followed a description of a cycle of life of these parasites. The size of the cysts varies according to the locality and the space allowed for expansion. No very great damage results from these cysts if they occur in the cellular tissue. In muscle tissue the danger increases with the depth. Those deposited in the posterior chamber of the eye give serious trouble. In the brain they are rare, are ultimately fatal, and the symptoms are very obscure. He had charge of four cases, in all of which he held autopsies; in two he had diagnosed hyda-

tids before death. A travelling doctor, age 46, first came to Dr. Reed in 1880, complaining of being easily fatigued both mentally and physically. Later he began to suffer from vertigo, which increased; his head would fall forwards; if he attempted to walk he staggered; very nervous; appetite bad; bowels regular; urine normal; stupor supervened, increased, and death followed. At the autopsy, a hydatid tumor was found.

Dr. Jakins, of Iowa, was inclined to doubt the correctness of the diagnosis had not the statement been proved by the microscope. Cases of this nature are rare in this country, and many physicians have never seen a case. It would be difficult for the parasite to find its way into the brain, and it is strange that in none of the cases were any of the other organs, especially the liver, affected.

Dr. Whittaker, of Cincinnati, did not think that these cases could serve as statistics until Dr. Reed furnished trustworthy and satisfactory evidence that the tumors were hydatid cysts. Certain cysts occurred in the brain, some of an apoplectic nature, which resembled in many particulars hydatid cysts. Who made the microscopical examination, and what the results were?

Dr. Reed could not explain how so many cases should occur in Ohio. It is just as easy for the embryo to get into the brain as anywhere else. He had examined many cysts from the rabbit, in which animal they are frequent, and he is familiar with the microscopical appearance of the tumors and the hooklets. He had examined two of the tumors, and demonstrated their hydatid nature. One of the tumors had been sent to Cleveland, where it was lost, the other had been stolen.

Several members objected to Dr. Reed's statements of the natural history of the tænia and the stages of development. The Chairman gave the generally accepted views on this point.

An Attempt at the Radical Treatment of Tuberculosis.

Dr. J. T. Whittaker, of Cincinnati, said that every one now believes the disease to be a mycosis. With the double purpose of directly attacking the cause of this disease with an antimycotic agent, and of producing the irritation which might result in proliferation of the connective tissues of the lung, he has made a number of parenchymatous injections into the lungs with solutions of the mercuric bichloride of varying strength. He chose patients in whom the disease existed in the first stage. Seven years ago he lost a patient

while aspirating a large cavity in the left upper lobe, before the class.

The bichloride was injected into the lung daily, at a depth of four to six inches, in quantities varying from one thirty-second to one-eighth of a grain. At the same time all patients inhaled from an atomizer a solution of the bichloride with common salt, three times daily for five weeks. There was no change whatever in the course of the disease. To render the bichloride less painful and more permanent, as well as to secure a preparation more easily absorbed and assimilated, it has been proposed by Stern Rader and Gechirhakl to make of it a neutral solution, by the addition of common salt in the proportion of ten parts of salt to one of the sublimate. This also renders the solution less productive of inflammatory *dépôts*. The experiments of Hollander with tuberculous sputa show that small quantities of no disinfectant suffice to render sputa innocuous. To absolutely destroy all tuberculous germs, it requires a proportion of two-tenths of one per cent. corrosive sublimate. To produce the same effect with carbolic acid requires a strength of three per cent. Two-fifths of one per cent. equals practically one grain to the ounce. A hypodermic syringe full of this solution contains about one eighth of a grain. This quantity can be injected with impunity into the lungs.

But will not the destruction of a large mass of the bacilli tuberculosis cure the disease? The mycologists do not, as a rule, look with favor upon experiments of this kind; yet clinicians can never be content with prophylaxis alone. There is still hope of affecting by drugs such chemical changes in the lung tissue as will make it infertile to the growth of the bacilli, and bring about the condition which takes place in the process of natural recovery.

Second Day—Wednesday.

The first paper was offered by Dr. Austin Flint, of New York, on

A Uniform Nomenclature of Physical Signs which Occur in Connection with the Respiratory System.

The International Medical Congress in London, in 1881, appointed a committee of five to consider the subject of a uniform nomenclature for these signs. This committee consisted of Dr. Flint (chairman), of New York; Drs. Mahomed and Dowell, of London; Professor Ewart, of Berlin; Professor D'Espine, of Geneva. The unfortunate death of Dr. Mahomed deprived the committee of an enthusiastic and

able worker. Since his death Professor Lépine, of Lyons, France, and Professor Trier, of Copenhagen, have been added to the committee.

Professor Flint's paper at the meeting was simply a provisional statement of these facts and included an accompanying tabulated list of such terms as the committee have already agreed upon. Professor Flint hopes that those who are interested in this subject in America will communicate to him such suggestions as may occur to them.

Hypodermatic Injection of Oil.

Dr. J. V. Shoemaker, of Philadelphia, said observations have taught that oils that cannot be swallowed or are rejected by the stomach can be absorbed by inunction and subcutaneous injection. Menzel and Perco first demonstrated the subcutaneous absorption of fat by injecting an ounce of it in a fluid state under the skin of a dog, and in the course of forty-eight hours it disappeared, without leaving any local effect. The first practical application of this discovery was probably made by Krueg on an insane person who refused to eat. Subcutaneous injections of olive oil, twice daily, were then administered, affording sufficient nourishment to keep the patient in good bodily vigor. At the end of a month he was induced to take his food in the natural way, and the injections were discontinued. Shortly after this, a most important result from hypodermic alimentation in a case of gastric ulcer was reported by Dr. James T. Whittaker, of Ohio. After exhausting other medication, the patient was given subcutaneous injections of drachm doses of milk, alternated with beef extract, every two hours for three days; the temperature declined, the pulse became stronger, and the existing pains and delirium disappeared. The milk and beef extract being not well borne by the skin, cod-liver oil was substituted for them, two drachms being given every two hours for two days, and one day as much as eight ounces was thus introduced. Two abscesses formed from the milk, but no ill effects followed the oil, which was well borne; its introduction was also free from pain. Oil can be used subcutaneously alone, or combined with other suitable agents. It is a valuable menstruum for suspending it in other drugs for hypodermic use. It can be given in connection with a suitable diet, and even with other medication by the mouth, or it can be used alone for alimentation. Oil deposited in this way in the tissues is absorbed, and is, no doubt, assimilated, and will alone keep up the nutrition of the body. It

is especially useful in diseases of the alimentary canal, as well as in all affections depending upon deficient nutrition. It will very often overcome an impoverished state and give tone and vigor to the system. For a purgative action, one or two injections of a drachm or two of castor oil usually suffices; but for a nutritive effect the same quantity of one of the bland nourishing oils, for example, cod-liver or olive oil, should be administered two or three times daily. In the event alimentation is depending solely upon the injections, they should be given about every two hours. For the purpose of giving oil hypodermically a large syringe, provided with a needle of good calibre, should be used, and the instrument should have a capacity of from two to eight drachms. The injection can be made in almost any part of the body well provided with subcutaneous cellular tissue, into which the oil should always be thoroughly deposited.

The Secretary read a paper by Dr. A. T. Keyt, of Cincinnati, on *Cardiographg*, which was defined to be the art and science of graphic representation of the heart's action by means of an instrument based on the same principle as the sphygmograph, and applied to the heart's point of impulse upon the chest. It is less known than its sister instrument, but was applied as early as 1880, by a French observer, and is worthy of attention.

Dr. N. S. Davis addressed the Section on the

Relation of Chemical Facts to the Question of Contagiousness of Phthisis Pulmonalis.

The determination of such a question should rest on the completeness of clinical history and observation, with a careful study by instruments of precision of all the secretions and fluids of the body. If the bacillus tuberculosis is found in some excreta, we are at once told that the case is phthisis, and the bacillus is the cause. Are these statements necessarily correct? Is it not just as fair to presume that the bacillus is simply an accompaniment of the diseased process found with it, but not the cause? The microscope has shown that the bacillus is not present in all cases. If tuberculosis follows the inoculation of tuberculous matter, or the bacillus in animals easily made tuberculous, then three probabilities may be asserted: 1. The bacillus may be the cause; 2. The matter may be the cause; or, 3. The excreta may be the cause. Inoculation with the bacillus *alone* has never been accomplished, and doubts must always accompany the results of the experiments until some one catches one of these

little organisms by the tail, and inserts it alone in the subject. One fault of medicine is jumping to conclusions from one, two or three data. As to spores, years of microscopical study have shown him that one can see anything with the instrument he sets out to find. Where do spores come from? If a body of a healthy man be exposed twelve hours in a high temperature, an abundance of spores will be found. All organic matter undergoing decay is accompanied by some form of spores. May not the atoms of bioplasm which develop into high forms, as cells, in the process of deterioration change in germs? Of the millions exposed to infection, he ventured that not one in a thousand manifests any indication of the disease. In the Hospital for Consumptives, in which there has been an average of fifteen Sisters of Charity as nurses since 1850, not one has died of phthisis. Of the internes, of whom there are usually four, not one that had not any indications of the disease prior to his entrance has died of consumption. If bacilli are floating in the air, and bacillus is the cause of consumption, why has not the human race been annihilated? We are told that it requires a predisposition. If so, then logic would say that the predisposition was the disease, and the bacillus was present as other germs.

Dr. Lynch thought that the bacillus is not a factor in the cause of phthisis. It is found wherever there is cellular matter. In every pathological state some bacteria are present, but they do not produce specific disease if carefully separated from the matter in which they exist. Ten young men inoculated themselves with the gonococcus without any result.

Dr. Whittaker believed that tuberculosis is contagious, and that the bacillus is the cause He believed that more than half of us have tuberculosis, but only a few develop into consumption and die.

THIRD DAY—THURSDAY.

Dr. J. H. Hollister, of Chicago, read a paper on

Cholera and its Treatment.

The origin was still more or less in doubt, but most probably on the Ganges. It first appeared in London in 1669, and in Paris in 1793. In Madras it was epidemic, and under certain meteorological conditions became epidemic. It is only communicated from foreign countries. It is not spread by air or ocean currents, but is always brought in infected ships from infected ports. It moves inland only along lines

of travel. It never appears in localities absolutely isolated. The comma-bacillus is the practical point of discussion. Is it the cause of cholera? The French Commission in Egppt reported adversely to such an opinion, and Dr. T. Lewis, of Calcutta, states that the so-called comma-bacillus, or something similar to it, is found in the saliva of healthy persons. The crucial test, inoculation and production of the disease, has not been performed. The conditions for the life and growth of the poison outside of the system are: 1. Warmth; 2. Moisture; 3. Decaying organic matter.

Dr. Austin Flint sent a short paper, in which he stated his belief in the specific character of cholera, and in the comma-bacillus as the cause. It may be disseminated by air and water; but are there not other means? He believed that cholera might be stamped out as in New York, in 1867, where house-to-house inspections were so valuable. It was important to treat the premonitory diarrhœa, to remove filth, and afford good hygienic measures. In therapeutics, which are wide, nothing compares with opium up to the stage of collapse.

Dr. N. S. Davis was a total disbeliever in the idea of importation. He had seen cases develop in the city totally independent of each other, and before any such thing as cholera was thought of. It is one thing to follow the official record, and another to be right there yourself. It was in Chicago six weeks before it became known. He had reported a case of cholera two months before the authorities discovered the disease, but his statement had been pigeonholed. In July, 1866, it started in Chicago; a rainy season in August washed the city clean, and the disease died out. In October it became hot and sultry, and it broke out again in the filthiest part of tne city. The treatment of cholera is cleanliness.

Dr. Lynch had very little belief in the bacillus as a cause. In cholera nostra, with rice-water discharges, blue, cold surfaces and contracted skin, he uses morphia and atropia with immediate success. He would use it in cholera.

Dr. Jones, of New Orleans, believed in the germ theory as applied to cholera—that it is portable, and depended upon bad sanitation. It came down the river in 1832, and driving out yellow fever, caused six thousand deaths in twenty days.

Dr. Taylor, U. S. Army, thinks the disease contagious, but is doubtful as to the part played by the comma-bacillus.

Isolation, in his opinion, is an absolute preventive. Nothing equals opium in the early stages, but it is contraindicated in collapse.

Dr. Whittaker thought the disease imported, and a germ disease. No chemical agent increases in the body as does the poison of cholera. Koch did not claim that the comma-bacillus is the cause of cholera; it is present in all cases.

Dr. Jerome Corchrane, of Alabama, read a short paper on

Hæmorrhagic Malarial Fever,

and stated some of his conclusions as follows:

1. This form of malarial fever originates only in malarial regions, though it may exhibit itself elsewhere.

2. The poison is the same as that in remittent and intermittent fevers.

3. It may show itself in the following form: *a*, intermittent; *b*, remittent; *c*, congestive; *d*, quasi-continued.

4. The congestive form is almost necessarily fatal; the prognosis in the remittent and the quasi-continued forms is bad; the intermittent form is less fatal.

5. The negro is comparatively exempt.

6. Only those persons suffering under malarial cachexia are attacked.

7. One attack is not protective.

8. It begins usually in the afternoon or at night, with a chill, followed by fever, bilious vomiting, discolored urine, jaundice.

9. The fever, except in the remittent and quasi-continued form, is not usually high.

10. Skin harsh and dry.

11. Bowels constipated, liver torpid.

12. Vomiting, early nausea, matter yellow, green, black, or even blue.

13. The black vomit is usually changed to bile, and in the beginning of the case.

14. Characteristic red urine, profuse at first, begins with chill. In fatal cases, there is suppression.

15. This red urine is albuminous with granular casts. Color is due to blood-pigment hæmoglobin, not corpuscles.

16. The post-mortem appearances are similar to those of other malarial affections, with enlargement of the kidneys added.

Cases reported	642
Deaths	188
Per cent	24.60

Blood-corpuscles in the urine are accidental. The serum of blisters is colored the same way.

As to treatment:

1. The superabundance of bile renders the use of mercurials of great service. Some physicians use small, frequently repeated doses. Others like large doses; in one instance, a doctor was in the habit of giving 60 to 70 grains at a time.

2. Warm drinks are of service in promoting emesis, to get rid of the large amount of bile thrown into the stomach.

3. Sweating to reduce the harshness of the skin, and promote its action; for this purpose, heat to the surface, hot drinks, and occasionally diaphoretics are used.

4. Management of the kidneys is a disputed point. The majority are in favor of letting them alone. Even in suppression of urine, trust to the compensatory action of the bowels and skin.

5. Quinine was formerly looked upon as the sheet-anchor in this affection. It exerts less control here than in any other form of malaria, and is losing ground.

Dr. Ghent, of Texas, had treated forty-seven cases, with five deaths. He thinks the red color due to blood corpuscles. He uses calomel first, last, and always.

Dr. Taylor, U. S. Army, had an experience similar to Dr. Cochrane's. But he had always found micrococci in the blood of these cases, and always blood-corpuscles and albumen in the urine. It is very fatal. Quinine will control the fever to a certain extent, but nothing more. Calomel and bicarbonate of soda in small doses are of great value.

Dr. Joseph Jones, of New Orleans, thinks some cases of so-called hæmorrhagic malarial fever, or hæmaturia, are really melanuria. The fibrin is increased as in inflammations. There is red matter in the urine in all fevers. In melanuria, in addition to blood-corpuscles, there is also bile, as proved by testing with nitric acid. Serum of a blister is so colored. The origin of this disease is congestion of the kidneys, and the consequent pouring out of blood in the tubuli, just as in congestion of the brain. The rest of the pathology is due to the want of functioning of the kidneys because of this fact. The prime cause is malaria. He is prepared for good effect from calomel, since the pathology includes an increase of fibrin in the blood; but he would not abandon quinine.

SURGERY AND ANATOMY.

First Day, *April 28th*.—Dr. Duncan Eve, Nashville, Tenn., chairman.

False Doctrines in the Treatment of Fractures.

A paper on this subject was read by Dr. John B. Roberts, in the course of which he said: The great point in the treatment of fractures is, not the kind of dressing that is used, but simply the keeping of the parts at rest. Very little ensheathing callus is formed if the parts are held in coaptation. This is proved by post-mortem examinations. Where the fracture involves the joint, it is important that careful passive motion be commenced at as early a period as possible. Where the joint is not involved, there is no need of passive motion, and hence should not be commenced sooner than the fifth week. Passive motion should never be made while acute arthritis is in progress. Again, splints are frequently worn too long. In simple fractures of the fibula, one week of confinement is all that is necessary. In compound, or otherwise serious fractures, a much longer period is required. Another erroneous view is that which opposes the conversion of simple fractures of the cranium into compound, where the case is obscure and an accurate examination cannot otherwise be made. The danger of the wound is rendered little, if at all, more serious, and a definite diagnosis can be made. Another error is in the treatment of fractures of the nasal bones by the application of splints or adhesive strips. The proper method of holding the fragments in apposition is by transfixion with pins. Another error in this connection is the placing of canulæ in the nasal cavities to aid in holding the fragments in position.

The important factor in the treatment of fractures of the clavicle is to apply such a dressing to the sternal end of the bone as shall prevent it from sliding forward, as it would do from the weight of the upper extremity. This is to be accomplished by extending the angle of the scapula, and not by the wearing of an axillary pad, which cannot succeed in holding the bone in position, unless the pad be so large as to render its use unadvisable. He also claimed that the use of the angular splint for fractures of the neck of the humerus is an error. In fractures about the middle of the forearm, interosseous pads are seldom required if the fragments are put into accurate apposition, and the arm carried in the prone position.

Another error is the use of the straight splint in fractures of the lower third of the radius. The straight splint will do very well for the external surface of the arm, but not for the internal. In most cases the fracture of metacarpal bones can best be overcome by placing adhesive strips over the part attached to the fingers, and to a splint placed under the hand, and, if desired, projecting a little beyond the ends of the fingers.

Finally, it is an error to rely upon measurements of the lower extremities for the estimate of the result obtained from our treatment of fractures. It is surprising that although the fact that the extremities differ greatly in length has been repeatedly brought to the attention of the profession, it is an almost universal custom for surgeons to measure their broken limbs. Very often, too, where there is no natural difference, there is an apparent one from the position of the pelvis when the measurement is taken.

Dr. W. F. Peck, of Iowa, stated that, with reference to fractures of the condyles of the humerus, he had for fifteen years taught the importance of using no splints except for support.

Dr. Mudd, of St. Louis, remarked that the great point to be desired is the limitation of inflammatory action about the seat of fracture. Control that, and you control the amount of anchylosis of the joint. Put the fragments in good apposition, control the effusion into the joint, and prevent movement, and you get a good result. In fractures of the metacarpal bones, put the parts in position, put the pad near the joint, put on a splint, and bandage it firmly.

Dr. E. P. Cook, of Illinois, stated that in fractures of the lower end of the radius, the application of the posterior splint is all that is necessary. One case of this kind he had treated by applying a closely-fitting kid-glove to the hand, and a close bandage over the fracture, with direction to lay the arm on a pillow, in any position that was most comfortable. The result was perfect.

Dr. Roberts stated that he had not attempted to bring out anything new, but merely to present some of the more common errors for discussion. He agreed with Dr. Peck, that many fractures would be better treated without any splints than the ordinary splints. In fractures of the upper end of the humerus, it was better, in most instances, to let the arm hang vertically. Sometimes, however, it is best to let the arm fall forward. In many cases we need no splints at all. If we reduce the fracture, the interlocking of the fragments

will ordinarily keep the fracture in place. If the fracture is comminuted, however, it should be treated with splints.

The Treatment of Fracture by Wiring of Bones and Free Drainage,

Was the title of a paper next read by Dr. W. P. Verity, of Chicago. He claimed nothing strictly original for his paper, but thought that the combination was worthy of consideration. The wiring of fragments must be done in a thoroughly antiseptic method. The disinfection of the wire and its thorough flexibility can be secured by heating it to a white heat. A drainage-tube is used, and thorough irrigation accomplished. Eight cases were reported, in which he had employed his method with the most unvarying success. In some, the protruding fragments of bone were sawn off, the fragments adjusted, wired together, drainage-tube inserted, and the wound dressed antiseptically. Even where the periosteum had been removed, this method prevented the destruction of the bone, which seemed to retain its vitality and remain vascular. Adjourned.

SECOND DAY—WEDNESDAY, *April 29th.*—

Do We Find a Hitherto Unsuspected Danger to Surgical Lesions from Micro-Organisms in Enclosed Cavities?

Dr. H. O. Marcy, of Boston, presented a paper on this subject, and reported several interesting cases in which micro-organisms had been found in the abdominal cavity. In two of his cases a rupture of ovarian cysts had produced death, and the bacilli found could be reproduced by culture.

The third case was one of peritonitis in a young child, where recovery followed aspiration and incision. The fluid drawn off contained micrococci, which were reproduced on cultivation. These questions suggested themselves to him: Are ovarian cysts to be considered no longer closed sacs? How can bacteria enter the unopened abdominal cavity? Have we in cyst fluid a hitherto unsuspected danger?

Dr. W. A. Byrd, of Illinois, described an interesting case of what was probably a hydatid cyst of the right ovary, which was afterwards absorbed.

Dr. Peck, of Iowa, reported a case of large ovarian tumor, occurring in his practice, where he had placed the patient on treatment preparatory to an operation, but unfortunately just before the time set for ovariotomy she had intercourse with her husband, in the course of which the tumor burst, the swelling disappeared, and Dr. Peck was called, only to find her in a dying condition.

Dr. N. Senn, of Milwaukee, Wis., then read an interesting paper on

The Surgical Treatment of Cysts of the Pancreas,

and offered the following conclusions:

1. Cysts of the pancreas are true retention cysts.
2. Cicatricial contraction or obliteration of the common duct or its branches and impacted calculi, are the most frequent causes of cysts of the pancreas.
3. A positive diagnosis of a cyst of the pancreas is impossible; a probable diagnosis between it and some other kinds of cysts, amenable to the same surgical treatment, is adequate for all practical purposes.
4. The formation of a pancreatic fistula under antiseptic precautions, recommends itself as the safest and most expedient operation in the treatment of cysts of the pancreas.

Two Ovariotomies on the Same Patient.

Dr. Joseph Ransohoff, of Cincinnati, reported a case under this title, in which the two operations had been successfully performed within four years. He then gave a very full and careful history of bilateral ovarian disease, and operations therefor. He said that of thirty-two women on whom ovariotomy had been performed twice, five had given birth to an aggregate of fourteen children during the interim between the operations. He also showed by statistics that the mortality of second ovariotomies is much lighter than would be supposed—only four out of the five deaths in thirty-two cases being directly the result of the operation.

Dr. Reid, of Ohio, related the details of a case in kind, where the first tumor weighed twenty-five pounds (right vary), and the second—removed two years later—twenty-eight pounds. The patient made a good recovery.

Dr. Warren, of New York, stated that his preceptor had always been in favor of removal of the ovaries in two operations rather than to take them out both at one time. He thought himself that it was much better not to remove both glands in one operation, unless they were found extensively diseased and enlarged.

Dr. Charles Graffe, of Sandusky, Ohio, reported a case of

Giant Growth of Both Lower Extremities.

The patient is a young woman of 25 years, who presents an enlargement of the two lower extremities, the feet measuring over twenty inches in length. This enlargement, which is congenital, seems to consist of hypertrophy of all

the soft tissues of the parts, together with the bones, as far as it can be ascertained by palpation. The right extremity is larger than the left. The case has been pronounced one of elephantiasis Arabum, but it differs from that disease in being congenital.

Chronic Necrosis of the Tibia and Fibula of Ten Years' Duration.

Dr. R. H. Jenkins, of Hogansville, Ga., presented the notes of this case, occurring in his own practice, in which he had removed almost the entire tibia, and a portion of the fibula, the patient making a good recovery with a fairly useful limb. The necrosed bones were exhibited by Dr. Jenkins.

THIRD DAY—THURSDAY, *April 30th.*

Colo-Proctitis Treated by the Hot-Water Douche and Stretching or Division of the Sphincter Ani.

A paper dealing with this subject was read by Dr. A. Y. P. Garnett, of Washington, in the course of which he said that he fully recognized the importance of confining himself to the single class of cases indicated by the title and described in the cases reported. The disease under consideration is usually of long standing, or chronic in its character, and is a pure non-malignant inflammation confining itself entirely to the mucous or sub-mucous tissues, resulting, in some cases, in small superficial necrobiotic ulcerations just within the external sphincters, such cases being often mistaken for simple dysentery, and unwisely treated by injudicious medication as such. Five cases were then reported. The first was of a man previously healthy until two years before. During that time he suffered severe pain in the rectum. Examination showed chronic catarrh of rectum. An enema of four ounces of a decoction of ipecac with twenty drops of tincture of opium, were used as hot as possible every eight hours, except from midnight to morning. Improvement followed, but the mucous membrane was found thickened and covered by long villosities, vascular and soft. The sphincter was dilated, the villosities removed by scraping, and hot-water injections continued. Recovery was complete in fifteen days. In the second case, the rectum was too sensitive to permit examination. The sphincter was divided by the knife, and the rectum stretched. The patient was greatly relieved almost instantly. At the end of eight days she was discharged, cured. The third case had been operated upon for hæmorrhoids. A firm constricting band was

found just above external sphincter. The hot-water douche was used, the sphincters dilated under chloroform, douches were continued, the diet of hot milk ordered, and recovery followed. The two other cases were similar in character, and treated by the methods illustrated in the cases narrated with the same excellent result.

Dr. Garnett, in reply to a question, said that he gave the milk in the quantity of four ounces every four hours, and as hot as possible. He stated further that the English surgeons of late leave their patients almost entirely to hot milk.

Dr. W. W. Dawson, of Cincinnati, said he always used the knife. He thought the principle involved in successful treatment was rest, and that the proper operative course to pursue was either to divide, or temporarily paralyze, the sphincters by stretching. The recognition of the malady was very important, but by no means easy, as the morbid sensations were sometimes directed into parts remote from the point of disease.

Dr. Joseph Ransohoff, of Cincinnati, considered it a strange fact that in most of these cases of rectal disease, the pain is not limited to the rectum, but extends also to the transverse, and even the ascending colon. Why is it we have this intense pain when there is little or nothing in the rectum?

Dr. W. F. Peck, of Iowa, cited a case where, after the introduction of the hand into the rectum, the patient—cured of his original stricture—suffered from paralysis of the sphincters, and sued for damages. He thought a hand seven inches in circumference could be safely introduced.

Dr. Dawson thought no rule should be laid down as to the size of the hand—so much depending upon the size of the rectum. He recalled a case where thorough exploration by several hands was followed by death.

Dr. Byrd, of Illinois, thought that the paralysis of the sphincter may depend upon an ulceration of the mucous membrane about the sigmoid flexure. The presence of an ulcer would leave a point of irritation, which might cause the paralysis of the external sphincter.

Dr. Ransohoff said that the rectum, when distended, is limited in capacity only by the capacity of the pelvis, and that often, in the female, we have to search even for the uterus, when the rectum is impacted.

Tumor in the Temporal Region.

Dr. Owens, of New Orleans, presented a patient upon whom eight different operations had been performed for the

removal of a pathological growth in the skin of the left temporal region. After each removal of the growth, the last two being by the reporter, it had returned, and he desired some information as to its character. The Chair appointed a committee of examination, who reported later that it was a "recurrent fibroid," or, according to the pathological nomenclature of the present day, a "sarcoma," involving the periosteum.

This opinion coincided exactly with that of Dr. Owen, and it was advised that nothing more should be done toward extirpation, only pallatives being recommended.

Autoplasty.

A paper on this subject was then read by Dr. F. Formento, of New Orleans, of which the following is a synopsis: He referred to the great advancements that have been made in the numerous branches of surgery within the last half century, and more especially the advance that has been made in this peculiar branch within a few years. Autoplasty proper is the restoration of tissues taken from the region of the face by disease or injury. In some instances it implies the taking of tissues from other parts of the same individual or from another. Two cases were then reported in which the cheek and a greater portion of the upper lip had been torn away from the face of a young lady, rendering her not only unsightly, but unable to eat or talk on account of the enormous growth of cicatricial tissue that had resulted. The jaws could be separated only wide enough to admit the end of the little finger. Eight teeth remained in the jaws, but were forced into an almost horizontal position. The procedure was urged by the patient, notwithstanding the danger of failure, and also to her life. The first step was to dissect up all the cicatricial tissue in all directions as freely as possible. The large bands were then removed. A flap large enough to cover the denuded surface was then dissected from the neck, a good amount of adipose tissue being taken with it. This was secured to the denuded surface. Several others had to be taken from the neighboring parts before the surface was covered; for so great was the tension, that after the cheeks had been as freely dissected from the bones as possible, they could be drawn so as to cover only about a third of the surface. Sixty sutures were required to retain the flaps. These were removed at different intervals, and on the fifteenth day the patient was able to be out of bed.

The second case was that of a woman in his city, who con-

sulted a quack cancer doctor for an insignificant wart upon her nose. Caustics were applied, and when the small wart was removed, there was left a large hole in the nose many times larger than the original. This did not heal, and gave her much pain; the sense of smell was destroyed, and the Schneiderian membrane was constantly irritated. In the operation for its relief, he dissected up flaps from either cheek large enough to cover the ulcer, after the edges of the latter had been vivified by scraping with the knife and a spoon. The flaps were closely united, and union took place by first intention. The result was perfect.

Adjourned.

OBSTETRICS AND DISEASES OF WOMEN.

First Day—*April 28th.*—Dr. R. S. Sutton, of Pittsburg, chairman.

Treatment of the Secundines in Abortion and Labor.

Dr. Wm. H. Wather, of Louisville, said three methods have been urged: (1) The expectant method; (2) The immediate removal; (3) A course, intermediate. During the first two months of pregnancy no placenta exists, and the egg and decidua are usually expelled in abortion *en masse.* In case of retention of membranes, during this period, no radical operation should be performed, as the fœtal envelopes are comparatively inocuous, and the danger from trauma is relatively great. From the third to the end of the seventh month, it is advisable to remove the secundines immediately, irrespective of the condition of the cervix as regards dilatation.

The retained placenta in premature labor, or labor at full term, should always be removed at an early period. If the os is dilated, the fingers or curette suffices; if the os is not dilated, he employed a modification of the steel dilator of Scanzoni. The cervix can be dilated by this means to a width of two and one half inches, and the secundines removed by the finger, curette, or forceps. Instead of the curette, a piece of wire properly curved may be used. In the third stage of labor, if the placenta was not spontaneously expelled within thirty minutes, it should be removed. The old method of the application of the *vis a fronte*, by traction on the cord, and Crede's method of the application of the *vis a tergo* by expression, should be combined. But if the pla-

centa be removed sooner than fifteen minutes after the birth of the child there was danger of non-coagulation.

Dr. James R. Chadwick, of Boston, said it was impossible to formulate a universally applicable rule. The treatment during the first two months should be governed by the history of the case. If the woman had had previous abortions, it was advisable to temporize. Placental forceps were absolutely worthless; the best instrument for the removal of the secundines, as insisted upon by Dr. Sinclair, of Boston, was the finger. The finger was also the best dilator.

Dr. Green, of Kentucky, pursued the intermediate course.

Dr. Sinclair, of Boston, agreed with Dr. Chadwick that manual dilatation of the cervix is the best method. He was in favor of immediate removal of the secundines.

Dr. Carroll, of Kentucky, referred to the fact that the retention of a small shred of decidua or of a clot of blood is sufficient to cause alarming hæmorrhage. He thought the finger an excellent dilator.

Dr. Wather closed the discussion by saying that he advised the use of his own modification of Scanzoni's dilator only in extreme cases.

Parametric Abscess.

Dr. W. W. Potter, of Buffalo, N. Y., reported a case of this condition, which occurred suddenly, and rapidly developed. In little more than ten days from the first pain, an abscess, containing three pints of fetid pus, was opened by an incision into Douglas' cul de-sac.

The cavity was washed out with sublimate and carbolic acid solutions without healing effect, but the injection of an emulsion of iodoform produced a thorough cure thirty-three days after operation. Dr. Potter called attention to the following points of interest in connection with the case:

1, The rapidity of the formation of the parametric abscess in the non-puerperal state. 2. The rapid closure of the abscess cavity by granulations. 3. The large amount of pus (three pints) evacuated. 4. The beneficial effect of the iodoform emulsion. 5. The possible influence of cotton-root and gin, advised by a friend of the patient, as an etiological factor.

Laparotomy in Chronic Periuterine Abscess.

Dr. W. W. Jaggard, of Chicago, read a paper on this subject, written by Dr. Christian Fenger, of Chicago, in which the author considered first the best method of operation as the result of his own experience, strongly advising heavy

antiseptic dressings, and especially the use of iodoform when communication with the rectum makes it possible that feculent matter will come in contact with the abdominal wound. Where injections were necessary he employed boracic acid. He thought laparotomy was always preferable to the vaginal operation in these cases, because it gave so much better opportunity to reach the seat of trouble. He would always prefer exploratory vaginal puncture to suprapubic puncture as being decidedly more safe, and as giving fully as good results in diagnosis. In the author's three cases the abscess had in each case opened into the rectum, making the diagnosis easy.

Dr. Engelmann, of St. Louis, thought that as regards operative procedure, laparotomy ought to be the *last* resort, but not a *late* one. It is frequently impossible to make a diagnosis before the exploratory incision is made. He had lost one case from septicæmia in his earlier practice as the result of the imperfect *technique* of the operation.

Dr. Gordon, of Portland, Me., thought that in from one-half to two-thirds of all cases of pelvic cellulitis the physician is responsible for the production of the condition. The introduction of the uterine sound, application of iodine, nitrate of silver, and carbolic acid to the endometrium were apt to injure the genital structures if not carefully performed.

Dr. Reed, of Ohio, thought Dr. Gordon's statement entirely too sweeping, and he narrated the histories of three cases occurring in his own practice; two died; one made an incomplete recovery.

Dr. Quimby, of New Jersey, had one case in which the diagnosis was obscure. Dr. Gordon Buck's operation—incision from anterior superior spinal process of ilium to Poupart's ligament, introduction of finger under the ligament, introduction of pledget of lint—was performed, and the patient recovered.

Dr. W. W. Jaggard, of Chicago, referred to Dr. Byford's criticism of Dr. Fenger's operation. When an abscess discharges through the rectum it is usually possible to dilate this orifice so as to secure free drainage. The communication between abscess and bowel could be dilated with the finger or cut.

Dr. Sutton, of Pittsburg, had recently perfomed laparotomy for pelvic abscess, and the patient recovered. In cases in which the walls of the cavity cannot be united to the anterior wall of the abdomen, it is advisable after evacuation and scraping of interior, to fill with iodoform and close.

How soon after Exposure to Sepsis may the Accoucheur Resume Practice?

Dr. George E. French, of Minneapolis, said that he had addressed to some of the most distinguished medical men in this country and Europe letters of inquiry asking this question. In reply, Thornton, Savage and Hegar write that they believe time is essential—to be accompanied, of course, with careful cleansing; while Emmet, Battey, Marcy, Goodell, and Thomas in our own country, with Martin, Schroeder, Nussbaum, Volkmann, and Esmarch in Europe. write that they believe time to be entirely non essential and that thorough disinfection can be at once accomplished. The present weight of evidence goes to show that the materies morbi of contagion is a non-gaseous particle, capable of being acted upon and demonstrably susceptible of destruction. Some kinds of contagia have been isolated and their property of self-multiplication demonstrated. The presence of other contagia is inferred from analogous diseased conditions, and by disinfecting the supposed source of this latter contagion the morbid effects have been interrupted. Experiments show that the resting spores of the bacilli, the most difficult to destroy of all forms of life, can be killed by a corrosive sublimate solution 1 : 5000.

Particles of contagia most frequently find lodgment on our hands and particularly under the finger-nails. It is always possible after the ordinary use of a nail-brush or knife, to remove particles of dirt in which the microscope reveals living germs of possible infection. On this account, the author cuts his nails short and swabs under them with a blunt instrument covered with cloth wet with some disinfecting liquid. He formerly used for this purpose five per cent. carbolic acid, but this made the flesh crack; so he now uses instead corrosive sublimate solution 1.2000. For hang nails, cracks and abrasions he uses collodion.

All instruments are kept scrupulously clean as well as disinfected, and the nurse is regarded as one of the instruments. The June number of the *Centralblatt für Chirurgie*, of 1880, contains a most impressive contribution to this subject by Volkmann. In his letter to me, dated Halle, Dec. 5, 1884, he says: "I hold the same views to-day as at that time. A surgeon who disinfects himself well, can, immediately after making a post-mortem, undertake any operation known to surgery. Every morning from six to eight during the summer, I am obliged to give the students operations on the cadaver; and from ten to three I am busy in the hospital, ope-

rating and dressing wounds. I have never yet infected a patient. In the winter I have no operations on the cadaver. Comparing my results in the clinic, I can assure you that the mortality in summer is not greater than in winter."

To show his confidence in the possibility of absolute disinfection, he made the following experiments.

June 21, 1884, after laying open a dissecting abscess of the thigh in a pyæmic patient, and stripping the limb with both hands till they were offensively drenched with the pus, he carefully disinfected himself, and three hours later attended Mrs. M. in confinement.

July 22, in dealing with a case of pyonephrosis, before penetrating the kidney he came upon a foul perinephritic abscess. Passing through this the kidney was incised, explored, and its grumous contents scooped out with the finger. The hand was so long engaged in this work, that a more complete purulent saturation could hardly be conceived. In the afternoon of the same day he confined the wife of a physician, having stated to him the full extent of his morning exposure. In both cases the convalescence was perfectly normal.

February 11, 1885, he purposely infected his index-finger with the ichor of an erysipelatous case and after a corrosive sublimate washing, inserted it in a fresh wound from which he had just excised a tumor. He might multiply instances of this kind. The following characteristic letter, received from Prof. Esmarch, epitomizes the subject under discussion.

"If you have thoroughly disinfected yourself, you can immediately enter upon obstetric practice. Time does not destroy septic dirt."

Dr. Robert Battey, of Rome, Ga., thought that a consciousness of the danger of carrying septic matter was one of the greatest safeguards.

A Case of Subserous Fibroid Tumor of the Uterus

was reported by Dr. S. Paine, of Texas, as follows: The patient, white, forty-three years old, native of Louisiana, began to have pains in the abdomen and pelvis about two years ago; menorrhagia and leucorrhœa. A tumor was demonstrable, which grew so rapidly that all the abdominal viscera were encroached upon, and respiration was interfered with. The diagnosis of subserous fibroid tumor of the uterus was made. Squibb's aqueous extract of ergot, rubbed up in glycerine and water, was exhibited in large quantities, through one year, hypodermically, with the effect of causing almost

entire disappearance of the swelling. As much as ten grains, three times daily, were exhibited. No tendency to spasms, gangrene, or other expression of ergotism, was observed. The cardiac rhythm was slowed.

Dr. Nelson, of Chicago, thought that in the formation of omental adhesions ergot will, in many cases, control the growth of the tumor. The great mistake in the exhibition of ergot is that it is generally given in two small doses through too short a period of time.

SECOND DAY—WEDNESDAY, *April 29th.*

The Multiple Speculum Uteri and an Improved Dressing Forceps,

A paper on this subject was read by Dr. R. J. Nunn, of Savannah, Ga., in the course of which he said the speculum is of the antero-posterior bivalve variety, like Cusco's; it has the extension motion of Graves's, and, like it, can be reversed for a Sims's. The upper blade consists of two superposed leaves capable of lateral motion. Two lock-nuts fix this blade immovably in any position when such fixation is desirable, as when using the instrument as a Sims'. The arrangement of parts adopted gives great powers of expansion and self-retention. The dressing forceps has a downward and backward curve in the direction in which the jaws open. It has a spring catch, forming a useful polypus forceps, etc., and between the pivot and the jaws the shank of the forceps is formed into a scissors.

A New Speculum and a New Vaginal Irrigator

was then described by Dr. S. M. Healey, of Cumberland, Md. The speculum is a self retaining Sims's speculum; it is secured *in situ* by a sacral pad, with bands of steel, connected together by a ball-and-socket joint. The instrument was applied to a patient in the presence of the members of the Section. The vaginal irrigator is a long, corrugated glass tube, with a rubber diaphragm, containing two perforations for the insertion of a delivery and an escape tube.

Dr. Geo. J. Engelmann, of St. Louis, read a paper on

The Improved Technique in Gynecological Operations, Minor and Major.

He employs continuous irrigation with hot water, 115°–125° F., during all his operations, and uses semi-circular needles, and strong silk thread which has been disinfected. The operative *technique*, thus briefly sketched, has received no mention in any American text-book. Dr. Engelmann claims the following advantages for this method:

1. Cleanliness, or asepsis. 2. Field of operation is clear. 3. Rapidity of operation. 4. Hot water acts as an efficient hæmostatic.

The irrigation with hot water is an idea of his own, and he has used it for seven or eight years. The method of operating, with the exception of the hot water, is that extensively practised in Europe.

The "Role" of Bacteria in Parturition.

A paper on this interesting subject was read by Dr. Henry O. Marcy, of Boston. He thought the underlying idea was that normal labor is a physiological process and as such aseptic, hence antiseptic injections are unnecessary, and, beyond the securing of cleanliness, meddlesome and dangerous. When labor departs from the normal character, new factors are introduced. In instrumental labors, and where the hand is introduced into the cavity of the uterus, exposures are not unlike those incidental to any surgical operative procedure. The uterus in most labors is subject to lesions where infection may easily be superinduced and when thus infected, Dr. Marcy showed that the puerperal state made most favorable conditions for rapid development of microörganisms. He laid the utmost emphasis upon the use of all antiseptic precautions, and urged precisely the same thoughtful attention to all details as in a major surgical operation.

Dr. Healey, of Maryland, held that sepsis occurs in every labor, and milk fever was evidence of the fact.

Dr. Gordon, of Maine, said that he did not believe in antisepsis, but he did believe in cleanliness. He had no objections to hot vaginal injections after parturition, on general principles; he did object to medicated solutions.

Dr. Alex. J. Stone, of Minnesota, thought that the placental area, the cervix, and the vulvo-vaginal canal were the regions through which the resorption of pus usually occurs.

Dr. Hunter, of Minnesota, closed the discussion by saying that it was too late, at the present day, to appeal to the *vis medicatrix naturæ*. The experiments in the cultivation of germs, and the clinical observations in Vienna, Prague, Berlin, and other large cities, established the prophylactic value of antiseptic injections beyond peradventure or doubt.

Dr. A. Reeves Jackson, of Chicago, read a paper entitled

Vaginal Hysterectomy for Cancer.

A table based upon 256 cases of vaginal hysterectomy, compiled by Dr. P. F. Mundé, showed a mortality of only 24.6 per cent.; while the results of the operations performed

by Martin, Schroeder and Ohlshausen, *all of whose cases are published*, show a much higher rate of mortality, namely, 38.6 per cent. in 101 operations. This discrepancy is explicable by the fact that such tables as that of Dr. Mundé are based upon incomplete returns—the successful cases being published, and the unsuccessful ones suppressed. Figures will not lie if they have a fair chance. If the whole truth in relation to this matter were known, the mortality of the operation would be found much greater than it now appears. Taking even the foregoing most favorable report, vaginal hysterectomy has actually destroyed nearly one hundred years of life. It has yet to be shown that a single life, otherwise doomed by the disease, has been saved by the operation. The history of the operation does not afford ground for hope that improved methods in its performance will materially better the results. Schroeder's greatest success was obtained in his first 8 cases, with a mortality of 8.7 per cent.

Of all methods of treatment which have been used for uterine cancer, hysterectomy has given the worst results; the statistics seem to show that it has killed more rapidly than the disease itself. When cancer affects the cervix uteri, extirpation is improper because unnecessary. Supravaginal amputation, with a mortality only one-fourth as great, does all that can be done by total removal.

The diagnosis of cancer of this body is always difficult, and frequently impossible in the only stage in which extirpation can be proper or useful, and the so-called "palliative" operations are not only less fatal in all forms and locations of the disease, but more lasting in their good results, than the "radical" operations.

Conclusions: 1. Any operation for cancer which does not completely remove the disease will be followed by recurrence.

2. During life the diagnosis of the extent of cancerous disease originating in any part of the uterus is at present impossible; hence no operative procedure can afford a guarantee of complete removal.

3. In view of this necessary doubt, no operation is justifiable which greatly endangers life, provided other and safer methods of treatment are available.

4. Vaginal hysterectomy has sacrificed the lives of more than one-third of those who have been subjected to it—the mortality of the operation when done by those of greatest skill and experience being over thirty-six per cent.

5. Other methods of treatment, attended by not more than

from one sixth to one-fourth the mortality of vaginal extirpation are equally efficient in ameliorating the symptoms and retarding the progress of the disease, and have been followed by as good or better ultimate results.

6. Hysterectomy does not avert or lessen suffering; it destroys and does not save life. It is, therefore, not a useful but an injurious operation, and being such, it is unjustifiable, and ought to be abandoned.

THIRD DAY—*Thursday, April 30th.*

The Ring of Bandl.

Dr. W. W. Jaggard, of Chicago, read a paper on this subject, in the course of which he said that the object of his paper was to sketch very briefly the outlines of our knowledge upon this important subject, especially since the views of Bandl have been grossly misrepresented. The old theory of Roederer and Stein, Sr., displaced by the doctrine of Stoltz in 1826, is coming to the front again, as the result more particularly of the anatomical studies of Braune and the researches of Bandl. Bandl's doctrine is substantially that promulgated by Carl Braun in 1857. Professor Sales, in 1869, 1874 and 1877, approximates the position of Braun, Braune, and Bandl.

It is inconceivable that the little, thin-walled, nipple-like process, the cervix of Müller, could be so distended as to receive the entire head of the child, and still be capable of functional activity. If this proposition is regarded as demonstrated, the greater part of the cervix must have been filled out by the egg during pregnancy, and the cervix of Müller must play a very insignificant rôle. The cervix, as shown by Braune's drawing, is the lower segment of the uterus of the older observers, plus the little tube described by Müller.

After a careful review of recent evidence upon the topic, Dr. Jaggard said that it was impossible, in the present state of our knowledge, to assert dogmatically that the ring of Bandl and the anatomical internal os are identical, but that the weight of probable evidence, at present, is very decidedly in favor of such a view.

Dr. Gustav Zinke, of Cincinnati, then read a paper on

Emmet's Operation: When Shall it and When Shall it not be Performed?

and concluded his remarks as follows:

1. It is evident that the operation has been performed unnecessarily for symptoms similar to but other than those

arising from lacerations of the cervix. Further, that it has been done imperfectly, even without preliminary treatment, in many more; and the failure to give relief, as reported by several is due to these two causes.

2. That from our present knowledge we cannot, at this time, arrive at any definite conclusion, from the fact that many of the so-called consequences of lacerations of the cervix uteri are not settled beyond doubt.

3. That every one engaged in this department should carefully select his cases, and try every known means to give relief before resource is had to operation.

4. The operation should never be performed *eo ipso* in cases of simple fissures or lacerations of first and second degree.

5. In cases of eversion and diseases of the cervical or corporeal cavity, or both, although attended by hyperplasia and displacement, it has been observed that all the symptoms abated and the parts returned to their natural condition, and that no laceration was discoverable after alleviative measures were instituted first, which alone caused the parts to return to a normal condition.

6. There are some cases of extensive lacerations of the cervix that seldom give rise to any inconvenience, and that, therefore, an operation should be deferred until symptoms arise that will call for its performance.

7. The operation, although indicated, should never be performed until, by preparatory treatment, the parts have been brought into a healthy condition.

8. Near and during the climacteric period the operation should be postponed as long as possible, and the patient not exposed to any risks, since in many cases all the symptoms subside under proper treatment, and never return on account of senile involution.

9. The operation is justifiable in cases of lacerations of the third and fourth degree, without complications, if there is a history of malignant disease in the family.

10. The operation may be performed with perfect propriety in young women, as a preventive, if the laceration is bilateral and extends up to the cervico-vaginal junction, or beyond it, even though there are no pathological changes; indeed, it seems to be the duty of every one who observes a lesion to that extent, to urge the operation.

11. The operation is justifiable in any degree of laceration, and in rare instances even in fissures, when theer exist

cicatricial tissues, productive of reflex disturbances, annoying in character, and not tractable to any other treatment.

12. The operation is absolutely indicated in all extensive tears of the os, in which the cervix is everted, its mucous membrane and Nabothian follicles diseased, and especially if there be granular of cystic degeneration present, provided, the parts have first been restored to a healthy condition by palliative treatment.

Dr. Harvey, of Indiana, said that for cases of slight lacerations—fissures, so to speak—cauterization and deep incision will not suffice; they require Emmet's operation.

Dr. Wathen, of Kentucky, said each case must be an individuality. Some cases do not require operation; such cases are cured by the preparatory treatment.

Dr. Gordon, of Maine, had operated 225 times, with one death. He agreed with Dr. Harvey in his remarks. Dr. Gordon does not believe in such long preparatory treatment; as said by Peaslee, chronic inflammation is a misnomer. Inflammation is a process rarely lasting over seven or eight days; subsequently, there exist the products of inflammation merely—*i. e.*, chronic congestion. He had treated successfully cases refused admission at the Woman's Hospital of New York, because there was too much inflammation.

Dr. King, of Missouri, thought there was greater danger of the development of cancer in case of slight lacerations than in larger ones.

Dr. Carstens, of Detroit, thought that all lacerations should be operated upon.

Dr. Battey, of Georgia, was never impressed with the opposite character of the argument which would unite laceration of the cervix and epithelioma as cause and effect; with equal force, labor itself might be urged as a factor in cancer. He had seen extensive lacerations cured by local treatment.

Dr. Sutton, of Pennsylvania, said that he had operated in cases of lacerated cervix merely to satisfy the patient. Epithelioma sometimes occurred in the cervices of virgins.

Reasons for and Results of Some Cases of Tait's Operation.

Dr. S. C. Gordon, of Portland, Me., read a paper on this subject saying at the last International Medical Congress Sir Spencer Wells, in commenting upon a paper presented by Koeberle, of Strasburg, said: "As to castration of women for nervous diseases, we might just as well go about the country cupping men for similar diseases as to do what is

being done in removing ovaries of women." In reply to Dr. Gordon's direct question he said, "I believe that in no case should the ovaries of a woman be removed unless we can demonstrate beyond all doubt that there is actual disease." In reply to the question, "Do you mean by demonstration only that which can be made by touch?" he said, "Yes, most emphatically."

Dr. Gordon related detailed histories of several cases in which one or both ovaries or tubes had been removed. Improvement of all symptoms was observed in each case and in some of them a radical cure was effected. Dr. Gordon concluded that a close analysis of subjective symptoms, through a long period of time, is frequently adequate to establish the diagnosis of disease of ovaries and tubes, and indicate operation when absolutely nothing of a positive character can be ascertained by physical exploration. Some of these subjective signs are pre-menstrual pains, irregularity of menstrual function, alternate pallor and flushing of face, and an extraordinary mahogany-bronze color of the complexion resembling that of Addison's disease. Dr. Gordon observes no antiseptic precautions. He uses hot water.

Dr. B. E. Hadra, of San Antonio, Texas, presented a paper entitled

Intra-peritoneal Adhesions Considered in Relation to Battey's and Tait's Operation.

He concluded from the detailed consideration of four cases, taken as types, that intraperitoneal adhesions may exist high up in the abdominal cavity, between various portions of the intestines, and that in all cases of abdominal section, after examination of the uterus and annexa, the hand should be made to search for such adhesions.

Dr. Battey, of Georgia, said that both Sir Spencer Wells and Mathews Duncan had told him in London, a few months since, that the scope of Battey's or Tait's operation is limited; the former operator had seen but two cases, the latter but one case, in which the operation was deemed expedient.

It is necessary, in estimating the results of the operation, to allow a sufficient interval of time to elapse. The immediate effect is always favorable. But there comes a reaction, and the patient feels the improvement is imaginary. Cheer her up. Wait for the expiration of one and a half to two years before reporting your case. The results of the operation are uniformly favorable.

With reference to the introduction of the hand to search

for adhesions, as suggested by Dr. Hadra, he had little doubt that some good is effected. But this may arise from (1) traumatism, (2) imagination, (3) the actual severing of incarcerating bands. These bands, however, may form again.

Dr. Sutton, of Pennsylvania, called attention to the importance of always telling the patient that merely an exploratory incision is to be made, and then of being prepared for any emergency that may arise.

Dr. Wathen, of Kentucky, thought that the line of diagnosis advocated by Dr. Gordon is pernicious in its tendencies. Objective diagnosis is more reliable, although it must not be relied upon exclusively.

Adjourned.

DISEASES OF CHILDREN.

First Day—Tuesday, *April 28th.*

Dr. J. N. Pope, of Texas, Chairman.

Treatment of Diphtheria in Children

was the title of a paper presented by Dr. H. R. Kelly, of Galion, Ohio, in the course of which he said there had occurred five or six epidemics in his community in the last thirty years, and some cases every year for the last seven. He recognized two principal types, the "anæmic" and the "inflammatory." In the anæmic, there is a weak thready pulse, low fever, a feeling of lassitude, slight headache, little or no swelling of the glands, the throat looks anæmic, and the membranes seem depressed, their edges lower than the surrounding tissues. In favorable cases the disease lasts from two to three weeks. Croup is more frequent in this variety. When epidemic, it causes more or less paralysis. When fatal, patients die generally from heart failure. In the inflammatory variety the attack begins with a chill, high fever, anorexia, and full and strong pulse. Severe headache and earache follow, the throat glands become enlarged and painful, the face and eyes are congested, and there is more or less delirium. The throat has almost an erysipelatous appearance, and the membrane is bright yellow with edges elevated above the surrounding parts. The nose is generally implicated, and alarming epistaxis may occur. Croup is not likely to appear. The sloughing in these cases is sometimes extensive.

The treatment in the two forms is different. In the anæ-

mic, alcohol from the start, quinia if necessary, and tincture of iron in full doses frequently repeated. Locally, either as a spray or gargle, the following has proved most satisfactory:

℞. Acid. carbolic.....
Acid. salicylic.....āā ʒss
Borax.....ʒiss
Glycerin and water.....āā q. s. ʒiv.—M.

Sig.—Every two hours alternating with a drachm of a solution of chlorate of potash.

In the inflammatory variety, arterial sedatives at first, then alcohol freely administered, with quinia if necessary. Locally, a spray of:

℞. Tincture of iron.....ʒij
Chlorate of potash.....ʒj
Glycerin.....ʒij
Water.....ʒj.—M.

Sig.—Use every hour. If the membrane becomes fetid, add a few drops of carbolic acid.

Children should be made to drink as much milk as possible; three quarts a day are not too much. The treatment of the paralysis is strychnia, quinine, iron, electricity, and good, rich food.

Dr. Ulrich, of Pennsylvania, said that in his own practice he had abandoned the use of local applications. He had seen death produced by an attempt to make an application to the throat. Had first met with the disease in 1860; after a number of disastrous cases, he had scored a number of successes, with the use of large quantities of chlorate of potash, and had not materially changed his treatment since. He gives now as much chlorate of potash as the patient will bear; also tincture of iron and plenty of nourishment. He lets the paralysis alone, as it gets well of its own accord.

Dr. Williams, of Michigan, said that he gives large doses of quinine, tincture of iron (one drop for every year) every hour, and uses chlorate of potash as a gargle, with instruction to swallow a portion at each gargling. Gives as much nourishment as possible, and stimulants in large quantities. Applies locally tincture of iron after first wiping off the adhering mucus, and does not use the spray.

Dr. White, of Texas, stated that he had seen a child with well-marked exudation get well by giving it Epsom salts, and applying locally flowers of sulphur.

Dr. Pope, of Texas, had seen patches in the throat, with fever, from errors in digestion. He would consider paralysis as proving the disease to have been diphtheria.

Dr. Kelly, in closing, said that he had never had as great success in treatment as during the last year, and had never used the spray before. He had seen patients choke to death with diphtheritic membrane. It had not been his experience that the paralysis gets well without treatment.

SECOND DAY—WEDNESDAY, *April 29th.*

Successful Results of a New Treatment of Diphtheria.

Dr. R. J. Nunn, of Savannah, Ga., in a paper under this title, referred to the fact that sometime ago he had reported the efficacy of peroxide of hydrogen in removing diphtheritic membrane, and that from his success in the use of that drug he had been convinced that it was necessary to resort to antiseptic measures to combat the poison of this disease. He quoted Dr. Miguel to show the fact that the biniodide of mercury was three times as powerful a germicide as the bichloride. It could be employed in small doses, say $\frac{1}{300}$ gr., in an iodide of potassium solution, every ten or fifteen minutes, when necessary.

If the membrane was thick he thought it best to act upon it first by blowing papayotin upon it before the local application of peroxide of hydrogen. He also gives syrup of the iodide of iron when there is evident depravity of the blood. The iodide of potassium being highly diffusible, and possessing some antiseptic properties, as was evidenced by his having kept the urine of patients taking this remedy for months without the occurrence of decomposition, acts both as a germicide and vehicle. For this reason the strength of the solution of iodide should be as great as the comfort of the patient will permit. The use of small doses frequently repeated is to insure a constant flow of the germicide through the system. Out of fourteen cases treated last Winter, there were three deaths, and these three cases were the only ones treated without the biniodide of mercury.

To summarize the treatment, it included: 1st. A blood antiseptic, which is also 2d. A local germicide. 3d. A softening or digester of the membrane, and 4th. A solvent of the membrane.

Dr. Walter, of Little Rock, Ark., said the profession in his section had tried the biniodide of mercury, but had laid it aside. He used tincture of iron and chloride of potash and vaporized water. He favored the expectant treatment, the main reliance being placed on stimulants and feeding.

Dr. J. Weichselbaum, of Savannah, had used the same treatment as Dr. Nunn with great success.

Dr. Catlin, of Wisconsin, commenced his treatment, generally, with a heavy dose of quinine, sometimes twenty grains. He followed this with a saturated solution of chlorate of potash and with tincture of iron. He depended largely upon stimulants and nourishment. His method of using chlorate of potash solution is to order gargling and the swallowing of a drachm afterwards. He had tried the bichloride without marked results.

Dr. Nance, of Illinois, had never seen a case recover after the voice had been suppressed.

Dr. Upham, of Vermont, does not think too much alcohol can be given. He has seen a child take a pint and a half of whiskey in a day with good results. He treats diphtheria as he would any other case of blood poisoning.

Dr. Holliday, of New Orleans, has seen cases recover after loss of voice had occurred, but this was, he thought, only when the aphonia was due to slight œdema of the larynx from its proximity to the inflamed surfaces. When the membranes invaded the larynx and trachea, he did not think there was any hope of recovery.

Dr. Nunn, in conclusion, said that the peroxide of hydrogen acted as a solvent and disinfectant to the membranes. It was a harmless remedy and could be given to the parents to use *ad libitum*.

Repeated Doses of Castor Oil Especially in Certain Skin Diseases in Children.

Dr. L. Duncan Bulkley read a paper under this title, and said that he thought he was the first to give it in doses of some size, daily, for any considerable period. The cases described in illustration of the treatment had all been treated successfully with other remedies, and showed relapses when the treatment was left off too soon or through some negligence of the patient, and it was noticed also that tonics and other remedies, which before had disagreed or proved inefficacious, became useful adjuvants to the treatment. Most of the cases were accompanied by torpor of the bowels and accumulation of feces in the colon, but some were benefitted even when this was not the case. The doses were regulated so as not to produce purging. The first case, one of chronic urticaria, in a child of six years, was given castor oil in teaspoonful doses once a day for one month, and for shorter periods on three other occasions. This, together with adjuvants of quinine, tonics and lactopeptine, accomplished a cure, the disease having been exceedingly rebellious to reme-

dies before. In a number of cases of infantile eczema the same treatment was used with great benefit.

These cases together with a number of others, prove that castor oil in suitable doses may be taken with advantage, repeatedly, for a considerable period of time. The oil acts as a stimulant to the abdominal organs, the apparently tonic action being due largely to the improved absorption and assimilation. Many cases of urticaria and tonsillitis are due to reflex irritation from the intestinal tract, and are thus benefitted by the oil. For the administration of the oil, if a good quality is obtained, a lump of ice is to be held in the mouth before taking a dose; then wipe the mouth thoroughly so as to remove any oil that sticks to it, and finally take a drink of ice water. Thus administered, it is not a bad dose to take. The oil should not be mixed with coffee, wiskey or anything else.

Adjourned.

Editorial.

Cholera.

There seems to be no doubt of the existence of this disease in Spain, and we can calculate pretty accurately on the appearance of the epidemic in America before the end of the coming Summer. It will in all probability make its first entrance on this continent either in New York or Havana. Wherever it may first appear it is almost certain to repeat its former route through the United States sooner or later in 1885, and it will need the most careful attention on the part of the different municipalities to prevent its being a terrible scourge.

In Valencia, Spain, much attention has been given to the apparent success of Dr. Jaime Ferran, in inoculating for protection from cholera. He has studied under Koch (according to report), and after making many experiments upon the lower animals, he has succeeded in cultivating the cholera microbe for inoculation. The report of the special examining committee, to the Madrid Academy of Medicine, states his method of prescrion as follows: The injection of half a cubic centimetre of choleraic virus subcutaneously in the arm, produces at first a swelling, attended with redness and considerable pain. The accompanying fever lasts for several hours, the pulse and temperature being heightened notably. Then sets in a state of prostration, chills, diarrhœa, vomiting

and cramps, which condition lasts about twenty-four hours, a degree of somnolence being not infrequent during that stage. Forty-eight hours is the average length of time elapsing before complete recovery.

How much of this story is true, and how much is pure romance, is yet to be determined. No reliable data are at hand, and it is too soon to accept completely, or reject as a whole, the newspaper narrative. We are most decidedly sceptical, ourselves, in regard to its verity, but if any such process of inoculation were once proven efficacious the name of the Spanish experimenter would be placed alongside of that of the greatest of earth's benefactors—William Jenner.

We present this only as a part of the medical rumor which has already begun in this country in expectation of the visitation of the "black terror." The truth or falsity of the report will soon be known.

The "Plymouth Fever."

During the second week in April of the current year an endemic broke out suddenly and with great virulence in this mining town in west Pennsylvania, defying the best directed efforts of the resident physicians to stay its fury. Within a week nearly, if not quite, one thousand people, adults and minors, were stricken down, and perhaps because of this very quickness of attack, the doctors of the town failed to agree upon a diagnosis of the disorder, and it was described in the newspapers as "the mysterious Plymouth malady." Those treating cases of it variously denominated it typhoid, malarial, typho-malarial fever, typho-malarial meningitis, and it was even called spotted fever with malarial complications. Now, however, the post-mortem examinations made on the spot by Drs. French and Shakespeare, of Phila., have proved conclusively the fact of the fever being true typhoid, each one of their autopsies showing the characteristic lesions of the disease. We do not desire to, nor do we think it profitable to our readers to present to them, the terrible death-roll of Plymouth since the onset of the disorder, or the instances of extreme suffering and abject destitution caused by its appearance, but we do wish to call attention to the fact that this dreadful scourge which has been productive of so much misery might, in all human probability, have been prevented. The history of the causation of the outbreak we will give in as few words as possible.

During a part of January, February, and early March, 1885, above the town, within forty feet of the river from

which it draws its reservoir water supply, a man lay ill with typhoid fever, contracted in Philadelphia during Christmas week. While his illness lasted, the dejecta, without disinfection, were in part thrown out upon the snow within a few feet of the river, and in part emptied into an outhouse which had no vault, the contents remaining upon the surface of the ground with all chance of draining off into the stream with every heavy rainfall. The time of the beginning of the fever in the town corresponded within ten to fourteen days (the incubation period) with the time of the first full snow and earth thaw occurring in April. Can any one fail to connect the two incidents?

Families using well water in Plymouth have generally escaped the endemic. Is more proof required that the typhoid dejecta of one person may poison an entire neighborhood? There are several such instances on record, but none clearer than this. The lesson it teaches is one that should be borne in mind by every physician, in city or country—that too much care in disinfecting the excreted matter of patients suffering from typhoid fever cannot be employed. It is a desideratum for the safety of those around.

Dr. J. Staige Davis,

Professor of Anatomy, etc., in the University of Virginia, who was stricken by paralysis about May 1st, 1885, we are glad to learn is recovering, and hope is entertained of his restoration to active work again. The profession can ill afford to spare him yet.

Obituary Record.

Dr. S. S. Keeling.

On the 16th of May, 1885, this gentleman died at his residence in Norfolk, after a lingering and painful illness. The Doctor was a native of Princess Anne Co., but during the ten years he has lived in Norfolk, he has been known as one of that city's most prominent physicians. He was a member of the local medical society, as well as the Medical Society of Virginia, and was at the time of his death President of the Board of Health of the "City by the Sea." Respect for his professional talents, and love for his social and friendly qualities were freely given, even by those not of his intimate acquaintance, and his death is sincerely mourned by the entire city.

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Original Communications.

ART. I.—**Clinical Lecture* on the Diseases of the Testicle.—Fluid Tumors of the Tunica Vaginalis. (I.) Hydrocele. (II.) Spermatocele. (III.) Hæmatocele. (IV.) Hydrocele in the Female.** By FREDERIC S. DENNIS, M. D., Professor Principles and Practice of Surgery Bellevue Hospital Medical College, New York City.

Gentlemen: In the clinic to-day I propose to consider some of the fluid tumors of the tunica vaginalis, and to show you some cases to illustrate these diseases. In the last clinic I discussed with you the solid tumors of the testicle, and also showed you cases by way of clinical illustration. At a future clinic I will consider the subject of hernia and varicocele, and also some diseases of the scrotum. This will complete the list of the greater part of all the tumors of the testicle and its coverings.

(I) HYDROCELE IN THE MALE.—The first patient I will present to you this afternoon is a man suffering from a hydrocele. I will proceed at once to draw off the fluid from the tunica vaginalis with this trocar and canula, and, as you see, the fluid in this glass graduate is typical of hydrocele.

And now, gentlemen, *what is a hydrocele?* A hydrocele is a collection of serous fluid in the cavity of the tunica vaginalis, or in the tunica vaginalis along the spermatic cord.

* Delivered March 3rd, 1885.

Do not confound this condition with œdema of the scrotum, which consists of an infiltration of serum into the loose cellular tissue of the scrotal walls. This infiltration is often seen in cases of Bright's disease, and may co-exist with the presence of a hydrocele.

The *size* of the hydrocele varies from a tumor no larger than an English walnut to a tumor the size of a large melon. I have tapped a hydrocele which reached nearly to the knees and which contained a large quantity of fluid. This patient was a butcher, and was never seen without a long white apron, which device he used to conceal the appearance of the tumor.

The *age* at which hydrocele is found to be most common is a period between twenty-five and thirty-five years. It is not common to find hydrocele under the age of sixteen unless the hydrocele is congenital, or unless it is the result of a traumatic orchitis. Hydrocele is usually unilateral, but it frequently occurs as a bilateral affection. I have seen hydrocele upon both sides of the scrotum in about one-tenth of the entire number I have examined. In the majority of cases where hydrocele exists singly, I have found it to be upon the left side of the scrotum. It will be found in many cases that a hernia may exist at the same time with a hydrocele, and some of you recall the case in the clinic last month when I tapped a double hydrocele occurring with a double hernia.

The *causes* of hydrocele are:—

First. Any injury which develops a mild form of inflammation in the sac, thus destroying the balance between secretion and absorption.

Second. Hydræmia, as in general dropsical effusions affecting other serous surfaces.

Third. Syphilitic orchitis and other local affections of the testicle.

Fourth. All circumstances which determine blood to the testicle and which also impede the free return of blood from these parts. In brief, any disturbance of circulation in the spermatic and scrotal vessels.

Now, gentlemen, what is the *composition* of this fluid which is contained in this graduate which I hold in my hand,

and which fluid has just been withdrawn from the tunica vaginalis of this patient who stands before me in the clinic? About ninety parts in one hundred consist of water, while the remaining ten parts consist of albumen, salts and uncoagulable matter. I will now use the test-paper, and, as you see, the fluid is neutral in re-action. If I drop this small instrument into the fluid to ascertain the specific gravity, I find that it is about one thousand and thirty. I will now hold this graduate in such a manner as to obtain transmitted light, and you notice at once that there are millions of bright shiny specks, which give a sparkle to the fluid. These specks are crystals of cholesterine which are derived from fatty metamorphosis. If you examine under the microscope a few drops of this fluid you will find these crystals colorless, and they appear as tabular plates possessing sharp angles. If I add to this fluid from the hydrocele a small quantity of iodine which is contained in this bottle in my hand, also a small quantity of concentrated sulphuric acid, you see at once that the fluid will become a violet, then a blue, green and red color.

Indigo-blue is also present in some specimens. This is a new observation in the analysis of fluid from a hydrocele, and has been made by Prof. Welch. There is no observation upon this point recorded in any examination of hydrocele fluid. Indican is a normal constituent of urine in very small quantity. In certain diseases indican is found to be increased in the urine, especially in intestinal obstructions, strangulated hernia and intussusception. In these cases it is believed that a certain amount of indol is produced by prolonged pancreatic digestion of albuminous substances, and that the indol is excreted as indican. In hydrocele the indigo-blue is probably produced by decomposition of indican forming indigo-blue.

Hydrocele fluid contains, also, a considerable amount of fibrinogen, and I have also seen pure pus in one case which occurred in a congenital hydrocele which had been inflamed. The color of the fluid is generally light yellow, but this often varies in shade according to circumstances. When the fluid is bloody it is because a slight hæmorrhage has occurred during the operation of removing the fluid, or because the hydrocele has been slightly contused before tapping.

There are many *varieties* of hydrocele which are described in your text-books. I have been in the habit of classifying them in this way: (1) Hydroceles of the tunica vaginalis, which may be either congenital, acquired or encysted; (2) Hydroceles of the spermatic cord, which may also be congenital, acquired or encysted, and (3) Hydroceles complicated with hernia, varicocele or testicular tumor. This simple classification includes all the varieties with which the surgeon is likely to meet, and it affords also a classification based upon the anatomical arrangement of the parts.

A few words will be necessary to explain to you this classification.

The *first* variety—the congenital hydrocele of the tunica vaginalis—usually is found in infants; but I have tapped two cases, one of which was an adult, the other a boy, where there was a free communication established between the sac of the tunica vaginalis and the general peritoneal cavity. I tapped the hydrocele in the adult patient and drew off into a pail several gallons of fluid which came from the general peritoneal cavity. It was a novel method of performing paracentesis abdominis. The *second* sub-division under the first variety is the usual form of hydrocele where the fluid is contained in the sac of the tunica vaginalis. A number of such cases I have in the clinic here to-day. The *third* subdivision under the first variety is the encysted form, where a hydrocele is developed from a cyst, which springs from the sac of the tunica vaginalis, or from the connective tissue between the sac and the tunica albuginea; or the corpus Morgagni between the globus major and the body of the testicle becomes enlarged and thus an encysted hydrocele is formed.

The cavity of the tunica vaginalis is also found to be divided into compartments by membranous septa which form multilocular cysts in the cavity of the tunica vaginalis. In this way an encysted hydrocele is formed. I have seen as many as a dozen cysts in the common sac, and all these separate cysts shut off from any communication with each other.

The *second* variety needs no especial description, because the explanation which has been given of the first variety will apply to these subdivisions of the second with but little modification.

The *third* variety, where the hydrocele is complicated with hernia, varicocele or some tumor of the testicle, likewise needs no further description, as the terms which are employed explain the condition.

I have found it very common to see complications such as have been mentioned occurring with hydrocele. In the majority of these cases I think the hydrocele is secondary to the hernia, varicocele or solid tumor of the testicle.

The *signs* of hydrocele are—

First. Tumor of scrotum is pyriform with the base downward.

Second. Tumor grows slowly from below upward; is seldom, if ever, attended with pain unless injured; may have a slight dragging sensation when large.

Third. Tumor has spermatic cord above, the testicle behind and below unless an adhesive inflammation has disturbed these relations.

Fourth. Tumor has no impulse upon coughing unless the hydrocele reaches up into the ring and inguinal canal; the tumor cannot be reduced unless the funicular portion of tunica vaginalis is patent as in a congenital hydrocele and a tumor which is irreducible.

Fifth. A tumor which is transparent by transmitted light. Transparency is a pathognomonic sign and is always present, except in rare cases where the sac has become opaque by chronic inflammatory thickening or the fluid within the sac turbid from hæmatin or flakes of lymph, or from the presence of spermatazoa in the fluid.

The case which is before us to-day answers to the signs which I have just given you, and accordingly I will proceed to tap the patient who presents himself to-day with a fluid tumor of the scrotum. I have just introduced this trocar into the centre of the tumor, and you see the fluid is now flowing from the canula; but there is a change in the appearance of the fluid, and as I hold up this graduate you see that the fluid has a different color from the fluid which I showed to you and which belonged to the other patient. This fluid is lactescent in appearance, and this indicates that the fluid comes from a true spermatocele, or else that a hydrocele fluid contains some spermatic elements which may find their

way into the sac of the tunica vaginalis either by a puncture of the testicle by a careless surgeon at a previous tapping, or else on account of a rupture of one of the seminal tubules which had become dilated.

(II) Spermatocele.—The unexpected presence of this case of spermatocele is as gratifying as it is surprising, for it permits me to enter upon a discussion of this variety of fluid tumor of the testicle with a patient before us, and thus, from a clinical point of view, consider this rare affection. I had intended to speak of spermatocele during the clinic and to show you some of this variety of fluid which I have kept in these bottles, but I am delighted to find a case which illustrates the subject clinically instead of being compelled to rely upon specimens and fluids which I have preserved in my collection in order to illustrate this disease.

The question naturally arises in your minds in reference to a spermatocele, the same as in the case of a hydrocele, and that is, *What is a spermatocele?* A spermatocele is a tumor consisting of fluid containing spermatic elements. The origin of the tumor may be from the epididymis or from a dilatation of one of the seminal tubules. The spermatocele must not be confounded with false spermatocele, which is a hydrocele containing spermatozoa which have found their way in the sac of the tunica vaginalis from some accidental cause, a mention of some of which has already been made.

The symptoms and signs of spermatocele are:—

First. Uneasy sensation about the epididymis, attended with a feeling of slight traction upon the cord.

Second. Tumor situated above the testicle, and the tumor becomes notched in the centre above from continued pressure against the cord.

Third. The tumor has very thin walls and is translucent.

Fourth. The fluid when examined contains spermatozoa in great quantities.

(III) Hæmatocele.—The third and remaining fluid tumor connected with the tunica vaginalis is *hæmatocele;* and while there is no patient in the clinic to-day to illustrate this condition, I have here on this white plate a most beautiful specimen from a patient upon whom I operated yesterday. Some of you

saw the patient in the wards of Bellevue Hospital, and were present when I cut into the sac of the tunica vaginalis. You observe here a piece of the tunica vaginalis which is very much thickened and indurated, while within is a small mass of fibrin. The interior of the sac is lined by fibrin very much like the interior of an aneurismal sac.

The pertinent question arises at this point, as it did when discussing hydrocele and spermatocele, *What is a hæmatocele?* A hæmatocele is a collection of blood in the sac of the tunica vaginalis, or in a cyst connected with the testicle, or spermatic cord; hence hæmatocele is to be distinguished as a tumor of the tunica vaginalis, or of the testis or of the spermatic cord. Thus it is evident that blood, instead of serous effusion, marks the difference between hæmatocele and hydrocele. The anatomical arrangements of the parts is identical in both cases, but the character of the fluid is different. The hæmatocele of the tunica vaginalis is the common variety, and the other two are rare in point of frequency.

The *etiology* of hæmatocele is usually by traumatism. The condition, however, may arise as a spontaneous affection. Under traumatism, may be cited kicks and blows upon the testicle, injuries to the testicle while riding horseback, etc. I have seen a number of cases of hæmatocele produced by a careless surgeon who has punctured the testicle in tapping a hydrocele. I have also operated upon a patient who suffered from hæmatocele as a result of violent taxis by a surgeon in the attempt to reduce a strangulated hernia the week previous to the tapping. Another patient whom I saw had a hæmatocele as a result of being struck with an iron hook. Hæmatocele will sometimes develop spontaneously, as when a hydrocele has been tapped and a large quantity of fluid has been suddenly withdrawn from a tense sac. The removal of so great pressure by suddenly withdrawing the fluid, causes the blood-vessels in the tunica vaginalis to give way and a hæmorrhage occurs into the cavity of the sac.

The *signs* of hæmatocele are first the sudden appearance of a pyriform tumor, which is not translucent, but which is heavy when supported in the hand. The scrotum is usually livid or ecchymotic, especially when the hæmatocele has re-

sulted from some injury to the parts. Pain is a prominent symptom, and one which is always present. Slight febrile disturbance usually accompanies the appearance of blood in the cavity of the tunica vaginalis.

The *diagnosis* of hæmatocele must be made—

First. From hydrocele by its absence of transparency, by its rapid development, by its weight and fluctuation.

Second. From a hernia by its absence from impulse upon coughing and of gurgling, by its reducibility and by its shape.

Third. From a varicocele by its manner of growth, by its irreducibility, by its pain and by its peculiar shape.

And now, gentlemen, inasmuch as I have discussed hydrocele, spermatocele and hæmatocele from almost every point of view except treatment, the next subject which interests us in connection with these diseases is the *proper treatment of these fluid tumors.* I will take up the methods of treatment as pertain to the different diseases in the order in which they have been described, and this leads us first to a consideration of the treatment of hydrocele.

The Treatment of Hydrocele is a subject upon which there is great diversity of opinion among surgeons. Some authors recommend simple tapping; others tapping followed by injection of the sac. The first may be termed palliative; the second, radical method of treatment. The rule which I would recommend you to follow is one which I have found by experience in a large number of cases upon which I have operated to have proved in every way satisfactory to the patient as well as to myself. I invariably recommend simple tapping first, and if the tumor refills a second or third time, I advise the patient to submit to an operation for a radical cure, which consists in the patient's taking ether, having the sac opened, and then having it stitched under strict antiseptic precautions, according to Volkmann's method. I advise simple tapping first, because I have seen many cases permanently cured by this palliative operation, as it is termed. In the first series of one hundred cases that I have operated upon I have investigated this point very carefully, and to my surprise I have found that over 25 per cent. of the entire number have been cured by a single tapping. In those cases

which I have recorded as cured, I mean that one, two or even three years have passed without return of the hydrocele. I am aware that this teaching is at variance with the teaching of most surgeons who believe in performing a radical cure at once, according to some such method as Volkmann's. I believe, however, it is the better plan to try what may be called a safe operation, which gives no inconvenience to the patient and which is followed, according to my own experience, by cure in a good number, rather than to try an operation which, though it has been robbed of its former dangers, is nevertheless not entirely devoid of risk, and which, under favorable circumstances, obliges the patient to lie in bed for ten days.

Acupuncture is another method which is employed under what may be termed the palliative treatment. This consists in puncturing the sac in a number of different places and then allowing the serum to exude through the minute punctures or permitting the serum to extravasate throughout the loose areolar connective tissue of the scrotum, whence the fluid is absorbed. I have performed this operation a number of times, but I am only pleased with it in cases of congenital hydrocele in the infant, where the acupuncture needle evacuates the sac. A large trocar used in a congenital hernia in an infant is oftentimes attended with danger, and the acupuncture needle is employed with safety and with little or no pain to the child. After tapping in the case of an adult, a suspensory should be worn and a compress applied in the case of the congenital hydrocele in the infant. In tapping a hydrocele, the tumor should be held firmly and tense in the left hand of the operator, and the situation of the testicle, which is behind and below, should always be remembered, so as not to injure this organ. Exceptionally the testicle is found in front. This happens when the testicle has descended with the epididymis transposed, or else the testicle may become adherent by inflammation to the anterior wall of the tunis vaginalis. I have occasionally found some difficulty in tapping for the reason that the trocar and canula would not enter the sac. When this happens it is the fault of the instrument, which should be made with care; for unless the shoulder of the canula fits exactly and

accurately upon the needle of the trocar, and quite near to its point, the surgeon will find that when the point of the needle touches the sac, the sac will suddenly retract and the canula will not follow the needle, but remain outside of the sac, and the opening in the sac contract and prevent the canula from entering the interior of the sac. This mistake, which is indeed an awkward one, as well as an embarrassing one for the operator, is likely to follow the use of a badly fitting trocar and canula. This accident is especially likely to follow in cases of hydrocele in young people where the tunica vaginalis seems to possess a power of retraction which is stimulated by the needle pricking the sac. You cannot exercise too much care in selecting a proper instrument for this simple operation, for upon the construction of the instrument depends, very often, the success of the operation.

Another method of treating hydrocele without using any means to obliterate the sac by inflammatory process or otherwise, is simple incision with a lancet or a small bistoury, and allowing the contents to escape through the opening. This method is good in some cases, but has certain objectionable features which are too obvious to mention.

And now, gentlemen, in regard to the *radical treatment of hydrocele.* All these operations have one object in view, viz: the obliteration of the secreting surface of the interior of the sac. Among the list may be mentioned:—

1. Injection.
2. Seton.
3. Galvano-puncture.
4. Cauterization.
5. Excision.

(1.) The *Injection* of hydrocele has been practised for many years and is still the operation in general use. The variety of liquids which have been employed would include a long list, but among the most important may be mentioned port wine, sulphate of zinc, tincture of iodine, solution of iron, carbolic acid, iodoform, and various other drugs. Sir James Earle first proposed injecting the sac, and this was in 1791. The injection of iodine was suggested to the profession by Mr. J. R. Martin, who practised this method in Calcutta

during a period of time from 1832–39. The injection consisted of one drachm of iodine to three drachms of water.

It may be interesting to review the points which Mr. Martin made upon this method because at the present day substantially the same plan of treatment is in vogue. He claimed for his method the following things: *First.* That the maximum inflammation was attained in a shorter period than by any other agent, and that the inflammation itself was not in degree greater than was requisite to effect a radical cure. *Second.* That chronic enlargement of testicle was frequently cured, as well as induration and thickening of the tunica vaginalis. *Third.* That the failures were less than one per cent., and that infiltration did not occur.

In regard to the injection of iodine, according to my own experience, I am adverse to its use. The *first* objection is that the inflammation often becomes too severe to be consistent with safety, and it is always attended with pain; *second*, the chronic enlargement I have found to be increased, and *third*, the proportion of cures is not such as to make one have confidence in the operation.

If any remedy is used to inject the sac, the operation which was suggested by Levis is far superior to Martin's operation. Levis suggested one drachm of carbolic acid in liquefied crystals. I have employed this method with most satisfactory results, and have never had reason to regret the use of carbolic acid as a substitute for iodine.

If you examine the *Transactions of the Medical Society of the State of Pennsylvania* for 1881, you will find the technique of this most excellent operation fully described.

It may be an interesting historical fact to know that the injection of iodine was proposed on account of the accidents which attended the injection of port wine, as well as solution of sulphate of zinc, which were the operations in vogue prior to Mr. Martin's operation. Mr. Martin was persuaded to try a small quantity of iodine and to leave it in the sac of the tunica vaginalis, because the operation of injecting warm port wine was followed by so many and by so serious a train of accidents. In injecting the port wine, a large quantity

was used, and then the entire amount was withdrawn by a syringe. In the old operation the injecting substance was withdrawn; in the new operation, where iodine was substituted for port wine, the iodine was used in small quantity—only one drachm to two drachms of water—and this was left in the sac. In using the port wine in large quantities, extensive sloughing of the scrotum and testicles followed, besides other serious accidents, which Mr. Martin hoped to avoid by his operation.

(2.) The *Seton* has been used extensively. The method was employed by the Arabians in the fourteenth century. I have found this operation to yield good results in small hydrocele, where the patient is unwilling to have the sac opened. I have never seen the operation attended with any danger; but I know of not a few cases where the introduction of a seton has been followed by unpleasant complications. It is not an operation to be recommended at the present day, unless it be under exceptionable circumstances.

(3.) The method by *Galvano-Puncture* originated in Italy, and is one not attended with very satisfactory results. It has no advantages which especially recommend it for your consideration.

(4.) *Cauterization* is another method, and this is only mentioned to condemn it, as it is an operation deserving no encomium and possessing no advantages, but many disadvantages.

(5.) *Excision* of a piece of the sac, or simple incision into the sac, evacuating the contents of the sac and stitching the tunica vaginalis and skin together under strict antiseptic precautions yields the best results. This operation as practised at the present day after Volkmann's method is altogether different from the excision or incision as performed a hundred years ago by surgeons. In the large number of cases in which I have employed this method I have never seen any accidents attend the operation, nor can I find a case where the hydrocele has returned. In this operation there is no risk of exciting dangerous inflammation of the sac or peritoneum, and usually the patient is cured in about fifteen

days. This is the best operation for the radical cure when the principles of the strictest antiseptic surgery are closely adhered to in the operation.

IV. Hydrocele in the Female.—Before dismissing the subject of hydrocele, I wish to call your attention to a variety which is very rare, but which is found occasionally in the female. This hydrocele is developed in the canal of Nuck, and resembles in many respects an irreducible femoral hernia in the female. I have met with only one case of this variety of hydrocele, although I have seen many cases reported in the medical journals. The fluid is contained in a canal formed by the dilatation of the folds of the peritoneum, forming a sort of a sheath for the round ligaments, and the tumor is comparable to an encysted hydrocele of the spermatic cord.

The diagnosis of a hydrocele of the canal of Nuck is often attended with difficulty, for the reason that it is impossible to obtain transparency by transmitted light. The absence of impulse upon coughing and the sense of fluctuation are two very important links in the chain of evidence to establish a correct diagnosis. The presence of transparency by transmitted light, when it can be obtained, is a reliable sign.

The treatment in this case may be either palliative or radical. Tapping the tumor and withdrawing the fluid, and irritating the sac by manipulation, and applying a firm compress, will in some cases be followed by a permanent cure. If the cyst refills, the tumor must again be tapped, and the sac be injected with a solution of iodine. During this operation the surgeon should compress firmly the outer extremity of the tubular cyst with the thumb and forefinger, so that no fluid injected can gravitate towards the peritoneal cavity. This radical operation has yielded excellent results. In some cases, however, a severe inflammation has followed, and the patient has been in a critical condition for some days. It is always best to allow the injected fluid to flow out of the sac after the walls of the sac have been well manipulated, while the fluid is contained within the cyst. The operation of incision has also been recommended, and should be performed

in the same way and with the strict precautions as in incision of hydrocele in the male.

You may be surprised, gentlemen, that I have been so particular in my description of an operation which you might suppose the merest tyro in surgery would do without hesitation. Consider the great danger to your patient if you tap a hernia instead of a hydrocele. You must be careful to have your diagnosis correct before proceeding with the simple operation of tapping. You will be still more surprised when I tell you that when the diagnosis is correct, even then serious accidents have followed tapping. I know of one case of death from shock following the tapping of a hydrocele. This occurred in the practice of a colleague of mine in this city. I have seen in my own practice patients faint after tapping a hydrocele, and I am positive, as I am in the case of fatal shock already mentioned, that the testicle itself was not injured. I have found that young men are especially prone to this condition of fainting after tapping, and that in the case of elderly people, while they are not inconvenienced in the slightest manner by the operation itself, they nevertheless experience, a short time after the operation, a feeling of faintness, which is caused by the sudden withdrawal of a large quantity of fluid from a tense sac. It is well in elderly people to have them remain quiet after the tapping at least for an hour.

The Treatment of Spermatocele is to be conducted upon the same general principles as the treatment of hydrocele. It must be remembered, however, that great care should be exercised in regard to injecting the cavity, for fear that a violent inflammation may be set up in the body of the testicle, which may be entirely destroyed. In the cases of spermatocele where the corpus morgagni is enlarged, forming a cyst, the surgeon must bear in mind the fact that any irritating injection may find its way into the substance of the testicle. Simple tapping is not as likely to effect a permanent cure as is the case in hydrocele. Incision or injection is often resorted to in order to obtain a permanent cure. This disease, like varicocele, is often attended with a marked

mental effect, and a surgeon is frequently entreated by the patient to perform an operation when the necessity for an operation is not imperative.

The Treatment of Hæmatocele is simple. The tumor should be aspirated, tapped or opened by incision. Unless the blood is at once removed it is likely to undergo decomposition, and if any quantity is effused into the sac it is not likely to become absorbed, but is very apt to set up serious mischief. Some surgeons recommend non-interference in hæmatocele, except when the blood manifests some symptoms of suppuration. I am inclined to believe, after treating a good many cases by both methods, that immediate evacuation of the sac by a small trocar and canula offers the best chance for a complete, permanent and satisfactory recovery. This operation of tapping is attended with no unpleasant consequences, provided the trocar is surgically clean. On the other hand, palliative treatment, such as application of leeches, cold or hot fomentation only compel the patient to remain in bed, with the prospect of suppuration after a few days.

The presence of blood in the sac of the tunica vaginalis has set up such serious mischief as to make it necessary to remove the testicle. The changes which the blood has undergone, and the unhealthy action which its presence has induced in the surrounding tissues, have led many surgeons into the error of mistaking an old hæmatocele for a malignant tumor of the testicle. This mistake has occurred in the hands of some of our most eminent surgeons, and is one you should always be upon your guard against making, for it is a mistake which you will find can occur even though you have had considerable experience in the treatment of these cases.

I will now tap these cases which are here to-day, and at our next clinic the subject of hernia, varicocele and the tumors of the scrotum will be considered.

ART. II.—**Evolution of Antisepticism.** (Continued.)[1] **Antiseptic Midwifery.** By M. A. RUST, M. D., Richmond, Va.

Asepsis has made its entrance into the lying-in room, and daily snatches more and more maternal lives from the jaws of death.

Puerperal fever is obviously one of the oldest diseases, although no more ancient observations than those contained in the Hippocratic treatise on Epidemics have come down to us. By turning the leaves of history attentively, we meet with faint allusions to it at various times; and from certain rules and regulations in *Leviticus*, we might even suppose that a dim aseptic idea regarding puerperal conditions, was present in the minds of the *Babylonic-Judaic* priests.

Concerning the severity and frequency of the disease, we can form no accurate idea till we come to very recent times, when we can avail ourselves of reliable statistics. Richmond being gloriously distinguished by the total absence of even the pretence of a medical or scientific library, I can only offer such figures as chance to be at my command.

Dr. Max Boehr presents us with the most valuable inquiries into the frequency of death from puerperal fever.[2] Although limited to the Kingdom of Prussia, Boehr's researches are the most comprehensive on the subject which medical literature has ever offered, and bring to light sadder results than were ever before imagined. Summing up, from official sources, the number of deaths in childbirth which occurred in every year, in the Kingdom of Prussia, during a period of sixty years, from 1816 (the time when registration of births and deaths became compulsory by law) till 1876, Dr. Boehr finds that in those sixty years there had been 363,624 deaths in childbirth,[3] on an average 8,322 maternal deaths yearly to each million of childbirths, or 8.3 to a thousand.

To realize fully the magnitude of the calamity, we must

[1] See *Virginia Medical Monthly*, December, 1884.

[2] *Zeitschrift für Geburtihuelfe*, III, 1878.

[3] During the same period of sixty years the total number of deaths from cholera, among females of all ages, in Prussia, amounted to 170,000, and from small-pox to 165,000.—*Boehr.*

take into consideration that speaking of 8.3 deaths in 1,000 confinements does not mean 8.3 deaths amongst 1,000 mothers. Dr. Boehr calculates that in Prussia (and this probably will hold good for the whole Teutonic race, Anglo-Saxons included), every married woman comes in for 4.11 confinements; consequently, he says, the total number of childbirths has to be divided by 4.11. Counting, according to common estimation, three-fourths of the deaths in childbirth (some count seven-eighths) as due to puerperal fever,[4] the calculation discloses the appalling fact that, at the best, one mother out of every forty (according to Boehr's most stringent calculation it would make one mother out of every thirty) "is in the flower of her age torn away from her loved ones by a disease which in most cases could have been prevented."

I stood bewildered before these figures; had it not been for the trustworthy authority from which they emanated, I could not have given credence to them. Rightly has the Puerperal Fever Committee of Berlin in 1878 put at the head of its report: "Puerperal fever must be looked upon as, in the fullest sense of the words, a great national calamity, and we anxiously and expressly put the question: Can it be avoided, and how?"

Looking over Boehr's tables, embracing sixty years, we find but a slight variation in the rate of mortality between one year and another. Seeing this constancy of results, we are forced to the conclusion that an equally steady, persevering cause must have been in action all the time.

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[4]According to the researches of Dr. Dohrn, made on a basis of 30,000 confinements in private practice, the frequency of obstetrical operations appears to be fifty-two operations in 1,000 confinements, with a mortality of 4.3 per cent. of the operated, which makes 2.15 deaths from operations in a thousand childbirths; this would leave from the 8 3 deaths per 1,000 childbirths about 6 per 1,000 to be charged with puerperal fever. This last figure sustains another, though very slight, reduction from the small proportion where death is the result of convulsions, rupture of the uterus, hæmorrhage and other rare accidents and complications. But according to Boehr, who also extended his researches in this direction, all those reductions are counterbalanced by the cases of death in childbirth which sail under false colors, viz: the numerous cases where death in childbirth is by design referred to other causes, or where death is the result of various complications of puerperal fever weeks or months after confinement, or when death from puerperal infection occurs after a miscarriage, etc. All things considered, to refer three-fourths of all the deaths in childbirth to puerperal fever will be rather an under than an over estimate.

Probably the German rate of mortality amongst puerperal women is one of the highest. If we pass to countries where it is lowest—for instance, to England, where the rate of mortality from puerperal fever, great as it is, does not exceed 2 per 1,000, or to the United States, where, as far as we can judge, it is likely to be even less than 2 per 1,000,[5] we are struck by one prominent point of difference which distinguishes the two latter countries from Germany, viz: Whilst the great bulk of the obstetrical practice in England, still more in America, is in the hands of physicians, in Germany, on the contrary, only a small percentage of the confinements falls to the share of physicians. Out of 100 confinements, at least 90 are attended by midwives, and we cannot help admitting a correlation between the frequency of puerperal fever and the frequency of the midwife.

If now, from the outer world, we turn our steps inside the walls of the great lying-in hospitals, we find till very recent times, a rate of mortality from puerperal fever—not 8 out of a thousand, but 8 or 10, sometimes even 20, out of a *hundred* childbirths.

When puerperal fever, at times, was spreading like wild fire, it was called "*epidemic*" and referred to "miasms" in the atmosphere. The only remedy was to empty the stricken institution of all its inmates, to give it a good scrubbing, swabbing and whitewashing and to keep it shut up for a couple of months. In what condition things were[6] in a more

[5]It seems that New York city has succeeded in rivalling Germany in its puerperal death rate, exhibiting the same awful figure of 8.3 per 1,000. "From statistics obtained from the President of the Board of Health," (says Dr. H. T. Hanks, *Medical Record*, February 16, 1884,) "the startling fact is here manifest, that for the last four years, in New York city, out of 120,418 puerperal women, there have been 1,005 deaths from puerperal fever, or one in every 120."

The midwife may be comparatively more frequent in New York city than anywhere else in this country, but I do not know whether the New York authorities bring this circumstance into causal connection with the frequency of puerperal fever. New York, although located on a naturally healthy spot, shows an extraordinary rate of mortality from almost every disease. Like the red Indian, for want of adaptation; like the Hawaiian, through leprosy and civilization, the New Yorker also, owing to the baneful style of modern architecture, manifested in towering, stifling, crowded tenements, would cease to exist in a predeterminable period of time. Were it not for immigration, the population of New York would decrease with every day.

[6]Doublet, *Nouv. Recherch. sur les Fievr Puerp.*, Paris, 1791.

Rapport de Tenon; Voillemier, in *Jour. d' Connais. Med. Chir.*, Paris, 1839 and '40.

remote past, we can imagine, when we read that till the beginning of this century, in the "centre of civilization," in Paris, in the lying-in ward of the Hôtel Dieu, puerperal women lay crowded together by two, three and four *in one bed.* A little farther on, in our century, when the infectiousness and contagious communicability of *puerperal* fever became a subject of general discussion, we read that the mortality from that disease had considerably decreased since the surgeons of the Hôtel Dieu had succeeded in obtaining enough space to be enabled to assign to each puerperal patient *a bed to herself!* Or again, that an abatement of mortality was noted when the puerperal patients, crowded together in a room just over the surgical wards, were removed from that part of the house to better quarters. Or when, still later on, Professor Dubois made the admonitory remark that he had become convinced of the contagiousness of puerperal fever after having more than once observed that healthy parturients, placed in a bed just left by a puerperal-fever patient, were taken with and died of the same fever. It was, indeed, till times approaching ours, nothing extraordinary to see in European continental hospitals, a new incoming patient placed in a bed still warm from the former occupant who had died of puerperal fever.

Such examples, which could easily be multiplied if space would permit, throw a glaring light over the sanitary conditions of those times.

Cases where the contagium was communicated through intermediate persons, could not always escape observation, and we see, in 1839, Dr. Depaul, Assistant Surgeon to La Maternité, report a case of his own experience. He had delivered in town a healthy lady, shortly after having made the *post-mortem* examination of a patient who died in the Maternité of puerperal fever. The lady delivered by him was taken with, and died from, puerperal fever. But no heed was paid to such a portentous fact.

Dr. Semelweis, of the Vienna Hospital, was the first who, in 1846–47, furnished on a large scale the incontrovertible evidence that puerperal fever was propagated by the hands and fingers of medical attendants, students, midwives and

nurses, and that contagion or inoculation was prevented by carefully ridding of noxious matter the hands and fingers of those attendants.

The ubiquitous microbe then lying dormant in the womb of time, Semelweis assumed that the contagium was animal matter in a state of decomposition and was derived from puerperal discharges, suppurating wounds, and, above all, from cadaverous matter carried on the fingers and inoculated into the vagina by medical attendants and students, who went from one patient to another and from dissecting-rooms to the lying-in wards to attend to and examine the puerperal patients.[7]

Puerperal mortality was then in the Vienna Hospital at the enormous average height of nearly 10 per cent. From 1840 to 1846, out of 21,120 women delivered in the hospital, 2,260 died of puerperal fever. In one of those six years the formidable maximum of 15 per cent. was reached.

One often heard in those days the grim jest, not devoid of truth, that only those women who were lucky enough to be confined in the streets, on their way to the hospital, escaped puerperal fever. It was that they escaped the examining fingers. There was likewise amongst English physicians a saying that in continental hospitals, and especially in the Vienna lying-in hospital, they possessed the faculty of manufacturing puerperal fever on a large scale.

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[7]The conclusions of Dr. Semelweis were corroborated by the lesser mortality prevailing in the division of the Lying-in Hospital for Midwives; midwives did not dissect. And again by the records of the Vienna Hospital, which showed till 1823 a mortality from puerperal fever of only about 2 per cent. Before that time dissection was not obligatory; the student could study anatomy in a dry way, as it were, by books, pictures, by looking at the performances of the prosector, etc. The rate of mortality began to increase together with the introduction of the new plan of study by which dissecting was made compulsory. The student had to devote his first year of medical study almost entirely to anatomy and dissection, and during the remaining four years and the sixth year, which was devoted to preparation for the final examination, dissection was always more or less practiced, especially after the introduction of the anatomo-pathological studies. At the time of Semelweis pathological anatomy had become a favorite study. The fame of Rokitansky constantly attracted crowds of young doctors and students from far and near, who flocked to the "Dead-house" (now more properly called "Anatomo-Pathological Institute,") located within the enclosure of the cluster of buildings which forms the general hospital. *Post-mortem* examinations were going on all day long and numbers of students and doctors went thence directly to the lying-in wards.

With the simplest means, Semelweis vanquished this formidable evil. Nobody was allowed to enter the lying-in wards, or to go from one patient to another, without having previously methodically and rigorously washed and brushed fingers, hands and arms with a chlorine solution. The result was that in 1848 the mortality was reduced to 1.3 per cent., and it never again rose to the former height. For the last six years the mortality from puerperal fever in the Vienna hospital averages not quite three-fourths of one per cent.

Semelweis now publicly requested all his confreres, especially the directors of lying-in hospitals, to follow his example. He met with opposition. The whole doctrine was, not only something quite new, but, from its bluntness, exceedingly distasteful to many. What? They with their well-tended hands, with fingers glittering with diamonds, these titled and fashionable doctors, these medical privy counsellors should disseminate a deadly disease amongst the persons entrusted to their care? It was preposterous! In the heat of the strife, Semelweis accused his opponents of wilful murder; and thus, overshooting his mark, his Philippics made but feeble impression; his adherents were not numerous. Yet his teachings did not fall dead to the ground. Many of the younger obstetricians silently took heed to them and had the satisfaction of seeing the mortality in their clinics considerably reduced. On the whole, however, the seed sown by Semelweis lay dormant in the soil to spring up luxuriantly after the introduction of antiseptic surgery—about twenty years later.

Two years after the successful introduction of the system of Semelweis into the Vienna lying-in hospital, when I came to Paris, the matter was hardly spoken of. Doctors and students freely crossed from the Ecôle de Medicine, from surgical wards or from dissecting rooms, into the lying-in clinics to examine, each in his turn, the parturient women. They had to be provided with tickets of admission, but no question about washing the hands was asked. The same state of affairs prevailed when I left in 1853. The lying-in hospitals were hot-beds of puerperal fever, the rate of mor-

tality being about nine per cent.[8] The great debate of the Academy of Medicine, where these questions were ventilated, took place in 1858.

It was different in England. In 1851, Dr. Arneth, from the Vienna hospital, during a visit in England, read before the Medico-Chirurgical Society, at its meeting April 16th, 1851, a paper on the causes of puerperal fever and the prophylactic means introduced by Dr. Semelweis. From the proceedings of this memorable meeting we obtained the information that the ideas of Semelweis were at that time by no means new to English physicians—at least to a number of them. Many had observed the dreadful disease to haunt the steps of one or two medical attendants out of the whole number of practitioners in a large community. The remarks of Prof. James Simpson are worthy of notice, even to us at this day; they contain, in an embryonic condition, our whole system of antiseptic surgery and antiseptic midwifery.[9]

"The measures," he says, "so successfully adopted by Dr. Semelweis in the Vienna hospital to prevent or arrest the propagation of puerperal fever were beautiful from their mere simplicity, and were full of a great lesson to us all. They proved in a manner beyond all doubt that puerperal fever, in the great majority of cases, was propagated by medical attendants. This was the view entertained since many years by British physicians, whilst continental accoucheurs and writers on this subject believed that by contagious communicability of puerperal fever, we meant propagation from individual to individual."

Dr. Simpson was in the habit, for years, of washing his hands daily, generally many times during the day, in a solution of cyanide of potassium. "Thus," he says, "we were intuitively driven to use precautionary means to avoid propagation. Hence we never had in our lying-in hospitals the fearful mortality seen in most of the continental hospitals." Among 2,890 women delivered in the Edinburgh lying-in

[8]The mortality from puerperal fever in private practice in Paris was at that time about 3.5 per thousand, *less than half* what it is to-day in private practice in New York.

[9]Proceedings of Medico-Surgical Society, April 16th, 1851. *Edinburgh Monthly Journal*, July, 1851. James Simpson's Obstetrical Memoirs. London, 1858.

hospital during a period of fourteen years, only forty-seven deaths occurred (1.6 per cent.)

From the various instances adduced by Prof. Simpson, illustrative of the mode of propagation of puerperal fever, we will produce only one:

A physician having lost several cases of puerperal fever in succession, got rid of the plague by changing all his clothes. After awhile, without any detectable cause, the scourge sprang up again in his practice, when finally he found that he was wearing a pair of gloves which he had used during the time of the former epidemic.

"Now," says Prof. Simpson, who, as is well known, was a stout champion for the identity of surgical and puerperal fever, "if doctors, students and midwives, with their fingers containing particles of morbid matter, can thus, by inoculating that matter on the surface of the vagina, produce puerperal fever, no doubt, *under similar circumstances, surgeons could and did inoculate into the wounds which they made or dressed, similar matter, producing the similar disease of surgical fever in their patients*, and could and did, when attending at the time parturient women, become the unhappy media of producing puerperal fever.

"The discovery of any measure or measures to avert or prevent surgical and puerperal fever would form a most important era in the march of professional discovery. * * * We are the more encouraged to hope for such a result as we already know various conditions capable of increasing on the one hand, and decreasing on the other, the chances of the evil. I have no doubt that it would take many long years fully to convince surgeons and accoucheurs that they were occasionally the unhappy media of inoculating their patients with morbid matter, producing in them surgical and puerperal fever; but still it is my conviction that medical men would ultimately both believe and act upon it, and their doing so would be a means of saving numerous lives."

These prophetic words of a great and good man were uttered in 1851; it lasted about twenty years before the ideas underlying those words gained a hold upon the surgical mind; about twenty-five years till, after the advent of Lister, they became established in midwifery, and at this day, after thirty-three years, we can only hopefully say, that it cannot

take longer than a decennium before they will be universally recognized and acted upon.

Prof. Semelweis died in 1860, without reaping the fruit of his discovery. His name, pronounced oftener *now* than in past years, will at no distant day be familiar to every student of medicine who, on making inquiry into the origin and development of aseptic midwifery, will necessarily come upon the deed of Semelweis.

Lessons in antiseptic midwifery do not come within the scope of this unpretending paper. The periodical literature of Europe during the last decennium, and of America during the last few years, is full of instruction offered by more competent men. I only propose to cast a scrutinizing glance at the promising child at whose cradle I stood thirty-eight years ago. I say "promising child," because our whole knowledge concerning this subject is still in its infancy.

Notwithstanding all uncertainty, all variance of views and methods, and much groping in the dark, the principle established by Semelweis, that nothing shall approach the parturient woman, which has not previously undergone purification or disinfection, has remained and will, for all time, remain the same—just as the like fundamental principle of "antiseptic surgery," as expounded by Lister, despite of all variance of methods and appliances, stands unalterable.

The difference between Semelweis and Lister is this: The teaching of the former was the result of a lucky thought unconnected with any known biological phenomena; that of Lister, the achievement of a highly cultivated mind, the well matured fruit of earnest biological studies and researches. Lister's idea, barely defined, became at once clear to every scientific mind. This may, in part, explain the great immediate success of Lister and the non-success of Semelweis. Moreover, the question may well be asked, if a Semelweis, endowed with the mind of a Lister, would have been better understood by the generality of his contemporaries, or if the Lister of 1869 is conceivable in the year 1847?

Concerning the various aseptic methods, we find amongst the American authorities, Prof. Gaillard Thomas, most ad-

vanced in his requirements.[10] Many of the distinguished obstetricians in Germany and England are equally, if not more stringent in their methods; and there are a few who would have it be the rule that any practitioner who has been treating foul wounds, erysipelas, etc., or who has been dissecting dead bodies, shall be "*unclean*," and abstain from midwifery practice for seven consecutive days. The offering of two turtle doves at the expiration of the period of uncleanness has as yet not been demanded.

A cursory review of the reports from the principal lying-in hospitals and obstetrical clinics brings to light the happy fact that, notwithstanding widely divergent methods of treatment, all those institutions have alike succeeded in banishing the onslaught of puerperal fever. Institutions which were formerly the scenes of calamitous ravages by the fever, losing eight and ten per cent. of their parturient patients, now show a death rate not exceeding one per cent.—many clinics only about half of one per cent.; and these figures, it is asserted, would be still lower if the occasional admittance of already infected patients could be avoided. Seeing this result, the conclusion is forced upon us that success does not depend very much on this or that antiseptic, or this or that method of treatment, but that it is almost entirely due to the strenuous, unremitting efforts of each of the attending physicians to keep their patients protected by a thoroughly aseptic environment.

Antiseptic vaginal injections, before, during and after delivery take their place in the front rank of prophylactic measures. As to the method of their application (frequency and duration of the douching, etc.), scarcely two physicians will entertain the same view. Without questioning the usefulness of these injections, we will only point to the fact that after handling decomposing cadaverous matter, pathological

[10]Thorough disinfection of the lying-in room: Carpets removed, floor, walls, furniture, bedsteads and mattress washed or sponged with carbolic acid (10 per cent.), or corrosive sublimate (1.1000). Any laceration of the perineum closed at once by suture, all solutions of continuity and abrasions of the vulvar extremity touched with permanganate of potass., and painted over with gutta percha collodion. Frequent antiseptic vaginal injections continued for 10 days; still more frequent intra-uterine injections when fever sets in.

specimens, etc., repeated ablutions—even with carbolic water —will not entirely rid hand and fingers of the noxious matter, which betrays its presence often for days, by its specific animal odor. Nothing but energetic rubbing with the brush will serve the purpose. Nobody would assert that similar matter is more easily washed away from the vaginia with its innumerable folds, than it is from the smooth epidermis of the hands. This is only said to remind us not to place too much reliance on the corrective effect of injections when the cardinal point, protection by aseptic surroundings, has been neglected. On the whole, the usefulness of *vaginal* injections is generally conceded—the question at issue being whether they are, especially *after* delivery, *universally necessary.*

It is different with the prophylactic *intra-uterine* injections. Many observers are doubtful whether they be not more apt to hurt than to benefit. *Runge* (Berlin Lying-in Hospital) was amongst those who used intra-uterine injections extensively; lately he had a succession of puerperal fever cases, which ceased after intra-uterine irrigations were discontinued.[11]

Hofmeier[12] treated experimentally two series of normal cases—260 with the uterine douche, and 249 without the douche. He noted sixteen per cent. of febrile disturbances amongst the douched and only eight per cent. amongst the non-douched.

Heedful obstetricians have recourse to intra-uterine injections, when, at any stage of the labor, it has been necessary to introduce the fingers, the whole hand or instruments, into the uterine cavity; when, after delivery, the hand had to be introduced to remove retained portions of the ovum; when the embryo is putrescent, or when fetor of the lochial discharges is accompanied by a persistent high temperature.

Introducing the hand into the uterine cavity immediately after a normal delivery, merely as a prophylactic measure, "to make sure that everything is clean," has always seemed to me an interference fraught with danger and of doubtful utility.

[11]Zeitscrift für Geburtshuelfe, v. 2.
[12]Ibid.

Immediately after a normal delivery the interior of the uterus is aseptic; the introduction of the hand is apt to change asepticity into septicity. What we are likely to achieve by this procedure may be inferred from a necroscopic examination of the uterus made shortly after parturition. The inner surface then presents an almost cribriform aspect; fully one-third of it is occupied by the placental spot, which exhibits an uneven, more or less lacerated surface; many openings (the vessels which have communicated with the placenta), filled with grayish or dark red clots, are seen gaping into the uterine cavity, whilst from the rest of the walls shred-like remnants of the separated decidua hang down into the cavity. Whoever has seen and bestowed some thought on this condition of the uterus, will not put much reliance on the capability of the introduced hand to scoop small débris out of the uterine cavity.

According to Ahlfeld, it is precisely such small matter—shreds of the amnion, more frequently of the decidua—which produce the so-called "*auto-genetic*" puerperal fever, the septic matter being resorbed from the inner surface of the uterus. Salicylic acid, experimentally injected by Ahlfeld into the uterus, invariably reäppeared in the urine. Moreover, Ahlfeld's experiments would show that resorption is even more energetic in the uterus than it is in the vagina.

Without entering here upon the vexatious question, how septicity originates in the uterus under normal conditions and in the absence of infection from the outside, we may regard entrance of air into the cavity as a prime factor in the septic process. This is corroborated by the observation that imperfect contraction of the uterus, leaving, as it necessarily does, a door open for the entrance of air, is generally followed by rising temperature.

Amongst the *antiseptics*, corrosive sublimate has, within the last few years, come into the highest repute. Recommended by Koch, it was widely accepted, freely used and created an enthusiasm almost equal to that aroused, shortly before, by iodoform. The enthusiasm has somewhat cooled down. Several cases have been reported of fatal poisoning in puerperium caused by corrosive sublimate applied in the

shape of vaginal and uterine injections, in the usual solutions of 1:1000 or 1:2000. The first two cases met with incredulity. It is not so easy, as some might imagine, to draw the line of demarcation between the morbid phenomena of septicæmia and of sublimate poisoning.

Autopsy after septic diseases often shows alterations and lesions in the large intestines corresponding to those produced by sublimate poisoning—a fact which Schede has demonstrated by a number of *post-mortem* examinations. Recent sad experiences have added, in this respect, to our knowledge. The first fatal cases were soon followed by others, which admitted of no doubt. Studsfeldt, Schroeder, Voehlz, Winter, Schwartz, Thorn, all reported fatal cases; Stenger, Macurer, Elsaesser, Lomer, and Dr. Partridge, of New York—cases of grave intoxication with final recovery.

Dr. Schede, who for three years has used corrosive sublimate exclusive of other antiseptics, in all surgical cases and with the best result, and who was fully confident of his ability to control with opium and chlorate of potassa the toxic symptoms which occasionally appear, had at last to record one death from sublimate poisoning. True, death was caused, as Dr. Schede stated, by an oversight of the attending assistant surgeon, albeit it was a case of death from absorption of corrosive sublimate,[13] and shows that even in surgery the application of sublimate is not entirely free from danger.

We might conclude that in midwifery the mode of application of corrosive sublimate (frequent or continuous irrigation), as well as the particular condition of the genital tract with its numerous abrasions and small solutions of continuity, must render absorption of the metallic poison very easy, and that freedom from toxic effects (as we have seen to be the case in regard to iodoform), entirely depends on its speedy elimination.

[13]The case in question was the removal of a large cancer of the breast. Occlusion by sutures was not practicable. Antiseptic dressing with corrosive sublimate was applied as usual. The following day symptoms of intoxication appeared: diarrhœa, tenesmus, slight stomatitis, etc., yielding to the ordinary treatment in a few days. On the seventh day (Dr. Schede being absent), renewal of the dressing and rinsing of the large wound surface, (and this, in the judgment of Dr. Schede, was a grave error), with corrosive sublimate 1:1000. The same toxic symptoms re-appeared, and continued unabated for nine days, when death ensued, sixteen days after the operation.

However the opinions of obstetricians may differ in respect to the expediency and safety of douching vagina and uterus with corrosive sublimate, it is universally and beyond all question admitted, that for disinfecting fingers, instruments, etc.,[14] corrosive sublimate excels in efficiency all other antiseptics, and should never be missing in the lying-in room. I use it for disinfecting purposes upon all occasions, and also have adopted the sublimate compress, viz: a folded piece of suitable cloth saturated with a solution of sublimate 1:1000, which, immediately after delivery and cleaning, is applied closely against the vulva and renewed frequently, as often as it becomes soiled or dry. The application is so simple and easy that the nurse can be trusted with it, and even the patient herself can see that it is properly done. We may surmise that, if kept constantly moist and in juxtaposition, the sublimate compress serves as a barrier through which no floating germ will pass alive.

Many obstetricians, who object to injections, and at the same time are not disposed to trust to nature to keep the uterine cavity aseptic, insert into the uterus, after delivery, the idoform pencil, which is left *in situ* three or four days. Ehrendorfer's formula is :—

℞. Iodoform.....20 gram. (about ʒvss)
Amyli.....
Gum arabic.....
Glycerini.....$\overline{aa}$ 2 gram. (about gr. xxxiij)

M. S.—To be made in three pencils, each five or six centimetres long. (Two or two and one-half inches.)

Dr. Magan, of the Rotunda, Dublin, gives the uterine cavity, after delivery, a washing with corrosive sublimate, and then introduces an iodoform pessary made up with ʒiss of iodoform. No more injections are given. He maintains that the iodoform, apart from its antiseptic action, has a powerful effect in lessening the temperature.

For my part, I am delighted with the use of the iodoform emulsion (equal parts by weight of iodoform and glycerine) for lubricating fingers, hands, etc. I need not dwell on the great advantages this preparation has over grease, especially

[14] In regard to metallic instruments it has the sole disadvantage of sorely tarnishing the polish.

over sundry specimens of doubtful character which are occasionally presented.

In regard to sanitation of the lying-in room, the excellent recommendations of Dr. Gaillard Thomas embrace all that can be desired, though their consummation, considering the difficulties in the way, is likely to remain a desideratum. For my part, I feel contented if I can prevail upon the patient to have the old carpet removed. The stationary carpet (fastened to the floor) should never be tolerated in the sick room, not even in an ordinary bed-room. It is a snake in the grass, a mischievous imposition of fashion on our innate love of decoration, and is too often a filth and germ depository concealed under a display of gay colors.

Fashion has happily abandoned a kindred arrangement, devised, one might think, for the collection of civilized filth, namely, the draperies and curtains around the bedstead. Thirty-four years ago, Prof. James Simpson, from clinical observations of his own, and obviously with no presentiments of the biological views of the present day, remarked that he had "repeatedly seen more or less slight febrile action set up in a patient from the curtains being closely drawn around her bed for eight or ten hours during the night, being thus obliged to breathe an air loaded and affected with the morbid animal discharges from her own body."

Had it been my purpose to present a summary of the leading methods of antiseptic midwifery, this paper would be a failure. I have already transcended the space allotted to me and yet have touched but slightly on the subject.

It was my purpose, and I hope I have succeeded in bringing it out in sufficient relief, to hold up to the view, especially of younger colleagues, the following three points:

1. Puerperal fever has hitherto constituted a slow and constant drain on maternal lives. Death does not enter the lying-in room with rattling steps, disturbing the public mind, as he does in epidemics like cholera, etc.; nevertheless, if we may judge by statistical analogy, the total number of victims of puerperal fever, in a given period of time, will be found equally as great (in many places and countries twice and thrice as great), as the number of females slain by either cholera, small-pox or typhus.

2. Puerperal fever is a preventable disease.

3. Whatever method of antiseptic treatment be adopted, it will be of no avail without the most scrupulous cleanliness of persons and surroundings, cleanliness with all the new meanings which modern science has put into this old term. Physicians are becoming daily more and more imbued with this principle, and accordingly "take heed to their ways."

But the question has arisen: *How can this new gospel of cleanliness be effectually preached to midwives?* In this country, where the bulk of obstetrical practice is in the hands of physicians, the midwife infrequent, and puerperal fever at a comparatively low rate, this question is not of such momentous importance as it is in countries where nineteen out of twenty confinements are attended by the midwife, and where, in her numerous daily visits to and fro from a diseased lying-in woman whom she is nursing, to a woman in labor, examining with her fingers here, and attending on a confinement there, she carries, unwittingly, the disease germ from house to house, from hamlet to hamlet, from village to village. Still, the question is worthy of consideration, even in this country, particularly in places like New York, etc. It may some day become painfully prominent, when together with the increase of a class which is unable or indisposed to pay for the physician's time, the uncontrolled midwife and puerperal fever shall have also increased.

The midwife is a public convenience. Her's is a laborious task—nursing, assisting, attending day and night, indefatigably, for a scanty remuneration. On the other hand, the average midwife, betaking herself to her calling without preliminary education, very often late in life, is illiterate and ignorant, seldom improves—on the contrary, has a tendency to *degenerate* in the course of time. Hence she is kept, in the countries[15] where she is frequent, under the control of the authorities.[16]

Since the Berlin Committee has reäffirmed the fact already

[15]Professor Schulze estimates the number of living midwives in Germany at about 40,000.

[16]A recent law in Germany enjoins upon the practicing midwife to appear on a fixed day once every six years, before the Chief Physician of the district, for *re-examination.*

observed, that in the majority of cases the midwives are the carriers of puerperal infection, we have been presented, mostly from Germany, with a redundance of papers suggesting means and measures to lessen the evil.

To the superficial observer the readiest remedy seemed to be to better the education of the midwives; but this would be equal to the abolishment of the present midwife and the substitution of something quite different in her place. The refined, college-bred young lady, (and nothing else will answer the purpose), would scorn the rendering of such services as the present midwife cheerfully performs. And if the proposed lady-accoucheur had to devote at least three years instead of three months to her studies, she would put the same value on her time as the physician does on his.

Without attempting a radical change in this direction, most of the schools for midwives are now tentatively teaching the principles of antisepsis, and Professor Schulze proposes to avert the prospective degeneration by compelling each practising midwife once every six years, (three years after the above mentioned re-examination), to attend, at the nearest school for midwives, a course of lectures, with obstetrical exercises, lasting fourteen days. From this restorative school she would return to her patrons freshened up, as an old clock returns from the watchmaker repaired, freshly oiled and regulated. The little expenses of the journey are to be borne by the community in which she is practising, a mere trifle in comparison to the great benefit it will entail.

No doubt it will take a long time ere the new gospel of cleanliness and the belief in invisible filth will have taken root among midwives.

Considering this, some writers deem it unwarrantable to wait for the result of experimental measures, and propose (Brennecke and others) to appeal directly to the public, enjoining upon husbands not to allow their parturient wives to be examined by any hand which has not previously been thoroughly disinfected.

Others propose to make the law which already requires "that every case of puerperal fever be reported," more stringent, by compelling all persons in attendance to give notice

to the authorities, whenever fever arises after parturition; moreover, to invest the health officer with authority to forbid the midwife, in a case of fever, all further nursing and visiting, and to suspend her altogether from practice for a fixed period. This, they think, would be a sure means of preventing the spread of puerperal fever through the midwives.

Prof. Schulze's proposal appears more to the purpose. In every suspicious case the midwife who is, or has been attending, nursing or visiting, shall, under official control, be thoroughly disinfected. This done, no suspension from practice is needed.

Now, there are various ways by which to cleanse and disinfect a midwife. The *modus operandi* suggested by Prof. Schulze is not too harsh, and perfectly conducive to the end.

Under supervision of a female employé, the midwife is stripped of all her clothes, which are immediately sent away to be disinfected. She is put in a warm bath for half an hour. During that time her hands and forearms are rubbed with brush and soap six times (at equal intervals), three times with the addition of a solution of corrosive sublimate, 1:1000. Leaving the bath, she puts on freshly washed clothes and is let loose. She is now clean, and may take along with her our blessing on her thorny path. But in my mind the question arises, whether, under present circumstances, if this plan be rigidly carried out, the midwife will not have to spend a goodly part of her life in the bathing-tub?

ART. III.—**Prescription Accidents.** By WM. H. COGGESHALL, M. D., Richmond, Va.

Every physician in city or town practice can understand at once what the heading above means, for he has either been the victim of one of those unfortunate mistakes on the part of himself or the druggist, or else he is constantly fearing the occurrence of one. Our text is taken from the two late fatal disasters mentioned in the papers and journals of the last

few months, occurring in New York State. As possibly some of our readers have not learned the full details of these unfortunate affairs, we will give them at length. We take the latest case first, as there the pharmacist received and accepted the blame.

A cough mixture had been ordered for a child by the family physician, and when the parent entered the drug-store, in New York city, to have the prescription filled, the druggist was in conversation with a customer who had a few moments before entered, in relation to the purchase of Dover's powder. In some way the two subjects became involved in the druggist's mind, and to the father of the child who came for the cough syrup he gave the compound ipecac and opium powder—even going so far as to inform the gentleman how to rub up the powder with water so that it might be made a liquid mixture "as the doctor ordered"—and naturally enough, under the circumstances, the customer who wanted the opiate powder received the cough mixture. (It may be well to remark here that we think much suffering might have been prevented if the latter had had the presence of mind to distinguish a liquid medicine from a pulverized one.) The result of the error was, as we have said, disastrous to the little one's life. Within two hours from the time of delivery of the medicine the druggist discovered his error, and hastening to the house where its parents lived, did all—with ample medical aid—that could be done, to retrieve his terrible mistake, but unfortunately it was too late—the child died with the symptoms of narcotic poisoning.

The other case is one which teaches a powerful lesson to those of us in the habit of hasty prescribing, or writing prescription forms too hurriedly—a case where a comma in the wrong place resulted in sudden death. In Brooklyn, N. Y., a German physician supplied one of his patients with a prescription for some neurotic trouble, and it was sent by the patient to be filled, to a prominent drugstore in that city. The receipe read as follows:

℞. Atropini sulfurici.....1,5 milligrams,
Aquæ..... 30 grams.
M.—Use as directed.

The druggist had before this occasion put up medicine for the patient, frequently dispensing for him some of the more powerful alkaloids for the purpose of relieving neuralgia, on a physician's order, and consequently perhaps was not as circumspect in the matter as he would have been had the customer been a stranger. At all events the clerk, supposing this solution was to be used externally, weighed out one (1) gram and five (5) milligrams of sulphate of atropia, very naturally misunderstanding the quantity ordered. The prescriber intended to give his patient $1\frac{1}{2}$ milligrams of the salt, and should have written it thus:

℞. Atrop. sulph..... .....0.0015
Aq.....30.0.

The only excuse which can be offered for this method of writing, is the fact that in Continental Europe decimal fractions are frequently written with a comma (as a point), instead of a period, as is our custom, and the doctor was a German, educated in his native country.

The physician had ordered his patient to take the whole mixture—containing, as before stated, $1\frac{1}{2}$ milligrams, or about $\frac{1}{42}$ grain—at one dose. For some reason, however, the gentleman took only one teaspoonful when he first received the medicine, such a dose holding about three grains of atropia sulphate, and it is barely possible that his life *might* have been saved at this point if the mistake had been known, as cases are reported where active medical attention has saved life after the taking of four to six grains of the salt. Unhappily the victim took a second dose, of the same amount, with the natural fatal result. What final disposition will be made of the agents in this tragedy is not known at this writing.

If ever a lesson upon the subject of careful prescription writing was offered to the profession, it is certainly evident in this latter instance.

To suddenly take the life of a fellow-man is always terrible, but to take it by an egregious or maudlin error is something still more awful, and one may imagine the unenviable feeling which must fill the mind of the unfortunate accidental evildoer. In this instance it would seem that all

blame should not be placed upon the shoulders of the drug-clerk, as the daily papers have shown a tendency to do, because of the uncommon manner in which the doctor wrote his prescription, notwithstanding its correctness from a German point of view. The clerk evidently looked upon the medicine in its proper light, as he dispensed it in what is technically known as a "poison vial," although not labelling it "poison;" but, in our opinion, one of the great errors made by the prescriber was in not writing specific directions upon his prescription. Had that been done, a life, valuable beyond words to the now mourning family, would without doubt have been saved by the natural caution of the drug-clerk, who would have dispensed the medicine as the physician intended—not as he had ordered. There is hardly a general practitioner in this, or any other city, who does not frequently order just such a label as the one in this case—"Use as directed"—and probably not one but what, on sober reflection, would denounce the practice as dangerous. Attention has been called—and justly—to the danger resulting from the illegible chirography of many physicians in active practice, especially those who seem to have a blind confidence in the druggist's ability to decipher exactly their hieroglyphics intended for ounces and drachms, but this evil we have mentioned is one shared in by the good and bad writer together. There is rarely an instance where the prescriber cannot condense the directions sufficiently to have them written on the label. How often have patients forgotten verbal directions, and applied again to their doctor, to find out what "use as directed" meant, and how often have serious mistakes occurred where this unmeaning label has been found on a vial in the sick room? We, ourselves, have a lively remembrance of one instance, at least, of the latter kind, occurring unfortunately in our own practice, where a beautiful little girl of four years was nearly sacrificed on the altar of this asininity, and we know of many other cases in kind where the penalty paid for such thoughtlessness was not so severe. Let every practitioner, when writing the "signa" on his prescription, ask himself if he would like to take such a chance in his own household if he were not familiar with

drugs, and the probability is he will be willing to take a little more time and trouble and write his directions in full. Much more we would like to say on the subject of "prescription errors" suggests itself to us, but lack of space prevents, and we close this hasty mention of the matter by asking if sheer laziness is not a common reason for the too frequent employment of the label "Use as directed"?

Since writing the above another fatal instance of the same carelessness in failing to write plain directions on prescriptions has come to hand. In a late number of the *British Medical Journal* a case is reported where a young lady, affected with some minor throat trouble, was directed to go to a chemist's shop and procure a quantity of chlorate of potash—the intention of the prescriber being that she should use a solution of it as a gargle.

No written directions were given, and the drug clerk, supposing the patient to have been otherwise fully informed, simply told her to "use a teaspoonful from time to time" (whatever that may mean definitely).

The lady returned to her home, and took the potash in teaspoonful doses "from time to time," as we understand, swallowing the dry crystals at each dose. Only a few of these teaspoonful doses were taken before serious illness set in, and within five days death relieved the sufferer from the terrible agony of potash poisoning. *Verbum sat sapienta.*

Clinical Reports.

Chronic Varicose Ulcer. Treated with Hot-Water Dressings and Elevation. By B. MERRILL RICKETTS, M. D., House Physician, Skin and Cancer Hospital, New York City.

Patient, Sarah K——; servant, age thirty-five years; of German parentage. Admitted to the Hospital September 18, 1884, with an ulcer extending almost around the lower third of her right leg, and about three and a half inches in width. This condition having existed for fifteen years, naturally permitted of many plans of treatment, all of which had failed in their results.

At the time of the admission of the patient, the ulcer was surrounded by a hard, elevated and whitish non-sensitive border, within which was a pale, indolent, granulating surface, much lower than the surrounding tissues. The circulation in the foot was greatly retarded, which, in combination with enforced inactivity of the member, had caused anchylosis and slight atrophy of that part of the extremity below the ulcer—a condition which had existed for ten years. The ulcer was first treated with the various ointments, but with unfavorable result; this was followed by muslin bandages, first, then by rubber bandages, all with the same unfavorable result. Thinking to try the curative properties of "Mineral Earth," it was freely and extensively applied twice, and occasionally thrice, daily, and under its use the granulations seemed to spring up and assume a healthier aspect, but this was of short duration, as they gradually assumed their former condition. Knowing the virtue of hot-water dressings—both with and without bandages—they were resorted to, with some slight improvement in the condition of the ulcer, which, however, was only temporary. Then scarification was resorted to, accompanied with hot-water dressings, with no better results; dressings of iodoform, bismuth, balsam peru, and pyrogallic acid, followed. Then, again, opium was used locally and internally, without effect. During these various treatments the patient was taking a mixture containing bichloride of mercury and iodide of potassium to determine whether the ulcer was of specific origin or not. The question finally arose as to whether or no it was of a malignant nature, but upon microscopical examination there was no evidence of anything of this kind.

Now another important point arose—whether or not the leg should be amputated? Would it be best to allow this homeless woman, depending upon her own exertions for support, to hobble about in her present condition—for it seemed that she was almost beyond the reach of medical aid—and who would then be a subject for the profession, and perhaps for quacks and charlatans, to anoint with their different ointments, dressings, lotions, etc., or to amputate far enough below the knee so as to allow an artificial foot to be worn, thus enabling her to go about at her will and with some degree of comfort to herself? Which was the most charitable and proper plan? After some consideration it was thought best to give the patient the benefit of the doubt as to the efficacy of another remedy or course of treatment—hot-water dressings, accompanied by an elevation at an angle of 45°.

This course was adopted on May 5th, since which time there has been a steady improvement; the granulations being redder, more exuberant, and assuming a healthier aspect. The edges have softened and become reddened, permitting of cicatrization throughout the entire border. The granulating tissue has filled up until it is now upon a level with the normal skin, the pain is lessening, the circulation is becoming more active, and the patient's general health is plainly better. Previous to the course of treatment now in operation, there was the most excruciating pain in the leg at times, and relief could only be obtained through some one of the preparations of opium. The hot-water applications (temperature 120° Fah.), are accompanied by an elevation of the foot at an angle of 45°.

The advantages of elevation seem to be the hastening of venous circulation (by gravitation), at the same time retaining about the normal amount of arterial blood supply. The action of the water dressings is to irrigate the granulations and to wash away the accumulated fœtid secretions, besides keeping the surrounding integument and cicatricial tissue softened, thus allowing a more active recuperative process.

The appliances for this course of treatment are very simple and within the domain of any physician, or, in fact, of the patient himself. The patient is placed in a semi-recumbent position; at times being allowed to sit erect or lie upon the back, and the ulcer is covered with a thin layer of absorbent cotton, upon which is allowed to fall a stream of hot water at the rate of two gallons her hour. The water may best be supplied through a rubber tube connected with a douche-bucket at a point from six inches to three feet above the level of the parts to be irrigated, and this application should be kept up for, at least, fifteen of each twenty-four hours.

Experience has taught that rest alone is beneficial in the treatment of ulcers of any character, even in those of malignant origin, such as carcinoma, sarcoma, and epithelioma. With these the process of waste and repair cannot be so active as when there is a great amount of exercise of the part affected. This patient referred to being under our care for such a length of time has enabled us to test the efficacy

of many plans of treatment. This having been done, warranted us in stating that nothing but the above prescribed treatment has been of any benefit whatever, and we now feel that it will be but a few weeks before the ulcer will be entirely healed and the patient restored to health.

Analyses, Selections, &c.

Surgical Treatment of Obstruction of the Bowel.

Dr. Hunter McGuire, of Richmond, Va., after an excellent description of the different forms of intestinal obstruction, etc., in Volume II of Pepper's *System of Practical Medicine*, concludes the chapter with the following very practical remarks on the surgical treatment:

In cases of acute obstruction of the bowel from bands of lymph, diverticula, internal hernia, slipping of a portion of gut into some opening, or twisting, when the treatment suggested has been tried and fails, laparotomy should be performed; that is, the abdomen should be laid open, the cause of the obstruction searched for, and, if possible, removed. In acute cases a few hours, at most one day, may be spent in trying the medical means recommended. After that time, if the patient is not relieved, the sooner laparotomy is resorted to the better the chance to save life. Acute internal strangulation of the bowel from these causes has the same symptoms, course and termination that acute external strangulated hernia has. It demands the same treatment—removal, of the cause of constriction. Delay in performing the operation in the former is as certain to be followed by peritonitis, gangrene and death, as it is in the latter; and the surgeon who hesitates to open the abdomen and attempt to remove the constriction in a case of acute obstruction after a fair trial and failure of medical measures, is as culpable as the one who delays the operation of herniotomy for unrelieved strangulated hernia.

In rare instances spontaneous self-reduction of external strangulated hernia takes place; the cases are exceptional, and the fact is no apology for postponing herniotomy. So in occasional instances, acute internal strangulation is spontaneously relieved; here too the cases are exceptional, and the occurrence should be no excuse for delay in laparotomy.

To justify the operation it is not necessary that the precise site and nature of the mechanical impediment should be determined, although this can usually be done. It is only necessary to know that the cause of the acute obstruction is not enteritis or peritonitis, but a constriction mechanical in character, which no medicine or manipulation or expectant treatment can relieve. When diagnosis is clear and laparotomy is indicated to save or prolong life in intestinal obstruction, the aid of the surgeon should at once be invoked. Delay is fatal. Peritonitis beginning or in actual existence makes abdominal section more dangerous and lessens materially the chances of recovery. To make the operation absolutely the last resort when the bowel is injured beyond repair, when peritonitis is in full progress, gangrene threatening, or the patient on the verge of collapse, is a useless cruelty to the sufferer and his friends, and only serves to bring surgery into disrepute. If the truth were known, many of the cases of death following laparotomy should be ascribed not to the fact that the knife was used, but to the fact that it was used too late.

In intussusception not relieved by medical means the propriety of abdominal section is questionable. The subjects of this condition are usually children. Dislodging the invaginated bowel is not always practicable, and the opium or expectant treatment may end in spontaneous cure by the bowel righting itself or by sloughing off the intussuscepted part. It is doubtless that many of the so-called cures from the latter process subsequently die from contraction of the cicatrix at the site of the separation of the slough. In forty-three cases collected by Ashhurst of laparotomy for invagination, thirteen recovered and thirty died. The record is bad, and to some extent the heavy mortality is due to the fact that the operation was put off too long—delay in acute cases until sloughing had taken place, and in chronic cases until adhesion of the invaginated parts had occurred. Indeed, some of the cases reported were moribund when the operation was undertaken. Recently many successful cases have been reported, and it is fair to presume that the percentage of recoveries in the future will be greater than they have been in the past.

In acute intestinal obstruction due to bands, internial hernia, volvulus, or the presence of foreign bodies, as gallstones, there is no question that laparotomy should be performed after other measures for relief have been employed and failed. Death in such cases is inevitable and imminent,

and operative interference should not be postponed until peritonitis has set in. After the abdominal cavity has been opened the distended gut can easily be found and the fingers of the operator carried on down until the site of the restriction is reached and the cause of the obstruction discovered. If the constriction is due to the presence of bands or adhesions, they should be cut or broken up and the gut relieved. If an internal hernia is found or a portion of bowel has slipped into some fissure or pocket, it should be withdrawn and the parts restored to their natural position. If the cause of the obstruction is a volvulus, the bowel should be untwisted. If a foreign body is felt impacted in the bowel and closing it, unless it can be readily and without lacerating the coats of the gut pushed on by the fingers of the operator until it has passed the ileo-cæcal valve, the foreign body should be removed from the bowel by an incision and the wound in the bowel closed by sutures. If the case is one of intussusception, the invaginated parts should be pulled out; this is practicable where adhesions are absent or slight, but if the adhesions are very firm, and it is impossible to restore the parts to their natural position, the gut should be laid open above the occlusion, the edges of the opening should be attached to the margin of the external wound, and a fecal fistula established. If the case of acute obstruction be due to stricture of the small intestine, which is exceedingly rare, the gut may be laid open, and the patient recover with fecal fistula, or entorectomy or resection of the diseased part of the gut be resorted to. The operation of entorectomy has been recommended by many surgeons, and a large proportion of the cases reported recovered. In one case by Koeberle six and a half feet of the gut were successfully excised.

Uterine Tonics.

Dr. A. H. Kinnear, Metamora, Ill., writing on this subject in the *Peoria Medical Monthly*, says: Time was when many diseases that flesh is heir to were generally attributed to a torpid liver, and the first thing in order was to regulate the said viscus and all would be right. But the poor liver has had its day, and the physician's attention is now called to search in other fields for the hidden trouble, and when found proclaims to the world that the secret has been discovered and there is no need for further trouble or worry, and here rests; all further investigation would be useless, and his labors no matter how faithful he might be, would be fruitless.

Such may have been the case in the past in theory and practice of medicine, but certainly is not what we observe at the present time, for the causes and their remedies are nearly as numerous as the sands of the sea, each having its advocate, and to increase its perplexity new ones are constantly being added. And were we deprived of the privilege of reading our medical periodicals, many of them would never reach the notice of the general practitioner, and some of which it would have been a blessing if they had never been brought to light. But we have to test all, and in this way we soon learn the virtues of each and select for our use those which prove to be the most potent to restore to health those so unfortunate as to be stricken down with the many diseases man is subject to. The physician whose mind is well versed in the multiplicity of remedies we have to treat diseases with, is qualified and entitled to the respect and confidence of his fellow men.

Some two years ago my attention was called to the virtues of Caulocorea as a uterine tonic, with the request to give it a trial. I will state that I have given it a fair trial and find that it has proven in my hands what it was recommended to be by the firm who prepare it, (Dr James W. Lowell & Co., Portland, Me ,) in the cases in which I have tested it. Given in connection with the local treatment in ulceration of the os and cervical endometritis, also in hypertrophic discharges, I find that it gives greater aid than any class of tonics that are usually prescribed in such cases, that I have tried. It has also given good results in amenorrhœa. In the two latter its effects are similar to the old lady's silk dress, viz: Warm in winter and cool in summer.

I would recommend a trial of it by physicians who give particular attention to the treatment of female diseases, and believe they will be rewarded in their effort, and that they will find that it relieves pains and nervousness more readily than is reached by other remedies.

Treatment of Eczema.

Henry J. Reynolds, M. D., Prof. of Dermatology in the College of Physicians and Surgeons, of Chicago, read a paper at the Illinois State Medical Society, of which the following is an abstract.

He said an intelligent knowledge of the principles upon which treatment should be based always suggests the form of treatment that will be applicable to each case regardless of its name or location. The pathological condition being abso-

lutely identical in no two cases, so the treatment must always vary, and a knowledge of specified lines of treatment or combination of drugs said to be useful with a neglect of consideration of the principles upon which treatment should be based in each individual case, in this, as in all other diseases, is liable to mislead. Therapeutically speaking he regards the disease as always either acute, sub-acute, or chronic, regardless of its clinical name or location, and arranges the treatment accordingly.

In the acute, as in all acute inflammations, the great principle necessarily involved, is *rest*, which implies not only quietude of the member or part, but *rest from all irritating influences*, as scratching, irritation of lice, friction, dirt incident to the calling of the individual, too frequent washing, etc. Soothing and protecting measures, therefore, are indicated in this stage, among which may be mentioned Carron oil, poultices, etc.

In the sub-acute, as in all other stages and forms, scratching must be strictly prohibited, as it is the most fruitful of all sources of aggravation.

He uses in this and the chronic conditions (either of which may at any time develope acute symptoms and require the treatment changed accordingly) pure, impalpable fine boracic acid as a dusting powder—having first gotten riden of crusts and scales by soaking with oil and washing with soap and warm water. In the chronic, however, he uses greater stimulating measures, in the way of green soap frequently rubbed in during washing. To relieve intense itching he has found nothing so effectual as a first class letting alone.

He thinks bandaging and strapping advisable whenever practicable, and prefers the cotton roller to the rubber where there is much exudation or maceration of the skin. He reports two cases of 12 and 20 years' standing respectively, of eczema rubrum of the leg associated with varicose veins and ulceration, where many remedies had been tried without success, that he cured by the application of boracic acid and bandaging, and a saline laxative internally.

He says as certain constitutional conditions predispose to the disease, and therefore necessarily aggravate or prolong it when once established, these conditions must be sought after and be corrected.

He has but little faith in the popular skin remedy, arsenic, in this or any other disease; all he knows *positively* of the remedy is that you *can* do harm with it. Chrysarobin, internally, recommended by Stocquart, he has tried without any benefit.

Uses of Concentrated Foods.

One of the most effective combinations in dyspepsia, cholera infantum, and diseases resulting from imperfect nutrition is maltine with pepsine and pancreatine, containing, as it does, three of the all-important digestive agents, diastase being one. Dyspepsia in most cases will yield to this combination, while the system is invigorated by its nutritive qualities. It is useful also for constipation and chronic diarrhœa resulting from mal-nutrition. Maltine may be combined with the most valuable alteratives known—such as iodides, bromides, and chlorides—and is a remedy of high value in all depraved conditions of the blood. The maltine manufactured by the Maltine Manufacturing Company of New York bears a high name, and this has been still further emphasized by the award of the gold medal of the Health Exhibition, London, for their malt extract (malted wheat, barley and oats)—the only preparation composed of these three cereals. Professor Charles R. C. Tichborne, after an examination of the principal unfermented extracts of malt in the market, finds that maltine is the richest in two of the most important ingredients in those foods—namely, the phosphates or bone-formers, and that peculiar farinaceous digestive agent called diastase. Maltine consists of about eighty per cent. of pure food in its most concentrated and assimilable form. This eighty per cent. may be divided as follows: five and a half per cent. of flesh-formers; seven per cent. of heat-givers; two per cent. of bone-formers; add to this the diastase, which imparts to it the curious power of digesting all farinaceous food outside itself, and we have in maltine a most valuable adjunct to our invalid diet. In respect to the diastase, maltine seems remarkably energetic, and at the temperature of the human body one part liquefied "twenty parts of starch in two minutes," and had completely changed or digested that body in about an hour. Maltine possesses all the characteristics of a cereal extract as prepared from the grain. By combining these three important substances—barley, oats and wheat—a food is obtained which represents the average composition of the three cereals, and food already digested for use—a condition of immense value to the physician in those special cases where the digestive functions are impaired.—*Midland Medical Journal, Leicester & London, Jan. 1st*, 1885.

Tongaline. Some of its Uses.

Dr. Weathers of San Antonio Texas, states: "From the character of the formula I observe that "*Tongaline* is a com-

bination of such agents as my experience suggest to be very valuable, and is therefore deserving of great praise. I find it a splendid remedy, not only for those complaints for which it is recommended, such as neuralgia, rheumatism, and nervous headache in their various forms, but have also done good work with it in pneumonia and fevers, especially when the latter arises from malarial causes. Combined with a small quantity of aconite, I have found there is nothing better to equalize thoroughly the circulation and produce free diaphoresis. When followed by a few doses of quinine, the results have been remarkably successful. All who try "Tongaline" will be constrained to acknowledge its virtues."

Dr. Dumars of Peoria, reports the case of a man about 45 years of age (the janitor of the building in which his office is located) who had been a sufferer from rheumatism for nearly ten years. The attacks were very frequent and very severe, often necessitating the use of crutches, and would not yield to treatment with any degree of certainty. During the paroxysms relief from pain was secured only by the use of morphine. Having received a bottle of "Tongaline" he gave it to this patient, who derived so much benefit from the use of its contents, that he took the remedy regularly. Having used three bottles within four weeks he found himself entirely free from the complaint and has experienced no recurrence since, although eighteen months have passed, and he has been able to attend to all of his duties during two very severe months.

Canine Muscular Tissue Grafted on the Human Body.

This method of tissue-grafting, first introduced by a Danish surgeon, has been lately reported as successfully performed at Bellevue Hospital, New York City. A laundress, aged twenty-three years, had her arm caught between the rollers of a steam mangle, sometime during July, 1884, and much crushing and laceration of tissue resulted. After recovery from the accident the member was necessarily badly crippled from loss of flesh, the girl being barely able to move it, and entirely unable to move the fingers of that side. She applied to the hospital for relief, and, on April 7th, 1885, the grafting operation was performed. A healthy dog was etherized at the same time the anæsthetic was administered to the patient, and when insensibility was complete her arm was laid open at the seat of injury, and the ends of the paralyzed, contracted muscles were cut off to revivify them. At the same time a portion of one of the thigh muscles of the dog

was taken out by careful dissection, and transplanted into the open muscular space of the arm. Suturing and bandaging followed in both cases, and both human and canine wounds were speedily healed. The girl was reported, a few weeks after the operation, as recovering the use of her arm under massage, etc.—means vainly tried before the grafting—and bade fair to secure a thoroughly good use of the member, thus giving her the needed opportunity of earning her livelihood. If all the particulars as related above are essentially correct, the result of the surgical work is eminently beneficial to the community at large, in view of the frequent cases of deformity we see from vicious cicatrices, from burns, etc., which may, in many instances, be corrected by this method.

Treatment of Cholera.

In the *College and Clinical Record*, June 1, 1885, Professor Da Costa is reported as expressing the following views on this subject in a lecture delivered at Jefferson Medical College.

Prophylaxis.— Since filth of all kinds leads to a rapid production of the germs, the locality should be rid of the same. The dejecta and cesspools should be disinfected. Inspect the source of water supply, since the germs can obtain easy access to wells. Drink only filtered water. Speedy burial of the dead should be urged. No change in diet is necessary. Live as usual. Better avoid stimulus in the prophylactic treatment. Among the disinfectants to be used are corrosive sublimate, zinc chloride, cupric sulphate, iron sulphate and permanganate of potassium.

Internal Treatment.—Must check the early diarrhœa if you desire to be successful, for, in most cases, if you stop this you put an end to the disease. For this purpose the most valuable are sulphuric acid in combination with tr. opii deod., with aq. menth. pip. In India the acetate of lead, grs. iv, with pulv. opii, gr. j, at once with the diarrhœal outbreak, and continue every 3 hours until it checks the discharges. If the above cannot check the diarrhœa, use capsicum, gr. j, with opium and camphor.

Second Stage.—Here we have cramps, vomiting and purging. Now, stop the use of fluids; allow but little ice in the mouth. This is a point of great importance. As little food as possible. Stimulus in small amounts, but frequently repeated. Mustard to the epigastrium. Administer, every hour or two—

℞. Tinct. capsici.....gtt. ij
Tinct. opii. deod.....gtt. x
Aquæ camphoræ.....f ℥ ij. M.

If stomach does not retain the opium, give it hypodermically; but, if possible, give it by mouth, since it appears to have a local effect. To relieve the cramps, use chloral subcutaneously, in large amounts. When reaction has set in, allow fluids to wash out the kidneys. If he has not reacted, and is not doing well under opiates, try calomel, especially in cases in which the secretions have not been arrested by opium. Give at first, gr. v. to gr. x, then order gr. ¼ every hour or so. When the pulse is sluggish, the temperature below normal, use friction and a hot bath. In this the stage of collapse, stimulus will not be absorbed or it would be of utility, though brandy or whiskey might be tried hypodermatically.

Caffeine, gr. iss.–gr. ij, hypod., stimulates the heart's action. If still the patient fails and the veins are swollen, etc., resort to blood-letting, but possibly the injection of fluids into the veins is better; often the results are marvelous. The thickened blood is made to circulate. Use for this purpose the following:—

℞. Sodii chlor.....5j
Sodii carb.....5iij
Aquæ..... Ovj. M.

Get it up to 108° Fahrenheit and a specific gravity of 1.005.

Sig.—Throw in a few ounces at a time, until 40 ounces have been injected. When the patient again flags, throw in a like amount.

The inhalation of oxygen has done no good.

Treatment of Carbuncle by Oleate of Morphia.

In the course of a paper read before the Indiana State Medical Society, 1885, by Dr. James F. Hibberd, of Richmond, Ind., and published in the *Indiana Medical Journal*, May, 1885, the author makes the following remarks:

At the late meeting of the American Medical Association in New Orleans, Dr. L. D. Bulkley, a distinguished dermatologist of New York, read the first paper before the section on Practice of Medicine, entitled "The Treatment of Carbuncle Without Incision." As his paper will soon be published,* it is not my purpose to rehearse his views here, but to simply say that he announced that the treatment of carbuncle by the orthodox crucial incision, poultices, other hot applications and ointments, had been so unsatisfactory that for several years he had abandoned them all and substituted soothing applications of special mixtures, the composition of

*See Jour. Am. Med. Ass'n, p. 542.

which he detailed, for the most part applied on cotton or the pile side of patent lint, and paid particular attention to the constitutional treatment, insisting upon the value of supporting measures, tonic medicines, and the sulphide of calcium as a means of limiting suppuration. Dr. Bulkley detailed a number of cases, some of them quite severe, which he had managed under his new views with much better success than formerly, though his patients still went through the usual phases of the malady, but not occupying the full time period of seven weeks as of old, nor did they suffer the former serious local pain, nor the general constitutional depression.

As I had had a new experience in the local treatment of these painful and exasperating tumors within the last twelve months with a preparation to which he made no allusion, although exactly in line with his advanced views of the best management, I ventured, in the discussion of the paper, to make a plain statement of my experience in this behalf, and while it is not of sufficient extent to lay claim to an established treatment, it seems to me of sufficient importance to repeat here that practitioners may make trial of the remedy and determine whether my cases were happy co-incidences or a substantial advance of our knowledge in the local treatment of carbuncle.

The application I desire to call attention to is the oleate of morphia, and to illustrate my experience I will present the details of the first and the last cases where I made use of it:

On the 30th of April, 1884, T. N., an active business man of general good health, about sixty years old, applied to me for a painful swelling on his neck to the left of the ligamentum nuchæ, a little below the line of hair.

Telling my patient that he had carbuncle, and was likely to have several weeks of great local suffering and much general depression, I gave him some oleate of morphia, with careful instructions how to apply it, expressing the hope that it would do something to mollify the pain if nothing more, and this I did because of my experience in alleviating other painful conditions of the skin and subcutaneous tissue with this preparation of morphia. It was also to be applied to to the nodules forming near the principal swelling. The patient returned the next day, and quite to my surprise and gratification, stated that nearly all pain had ceased in the large tumor, all was gone from the smaller ones, and the soreness and stiffness of the neck had greatly diminished. On examination the smaller tumors were shrunken and no longer irritable, and the larger one had lost something of its

boggy feel, was apparently smaller, was but slightly sore, and the skin over it was more natural in appearance. The application was continued, and at the end of three days all pain and tenderness had left the neck, the smaller tumors disappeared, and the larger ones had the characteristics of a calloused indurated swelling under the skin, about half the dimensions of the original tumor, and this was absorbed in about a week or more.

Two or three months subsequently the patient had another disturbance near the same spot, beginning in an irritable pimple as the former one had begun, but a few applications of the same remedy applied by my direction arrested all further development.

On the 24th of April, 1885, Mr. J. W. G., aged eighty-six years, sought my advice for a tumor on the back of his neck, to the right of the ligamentum nuchæ, which was giving him much pain and anxiety. It proved to be a carbuncle an inch and a half in diameter, with a point of superficial suppuration on top. An inch below the main tumor was a smaller one, an irritable pimple such as the larger one was in the beginning.

The swelling was of several days standing, and a part of the skin covering it so inflamed that I feared the oleate of morphia could not be used with the success that otherwise I should have hoped for. However, I gave him the preparation, with instructions for its diligent and proper use, but explained to him why it might fail, and advised him, if he had no relief after a fair trial, to consult another practitioner, as I should leave for New Orleans on the afternoon of the next day. But at noon the next day the old gentleman reappeared at my office with a smiling countenance to give me some good news, as he averred, before I left, stating that the soreness of the tumor was nearly gone, the stiffness of his neck but trifling, and the pain so promptly relieved that he had had a good night's rest, the first of the kind since the swelling began. On examination the soreness of the smaller tumor was removed, and that of the larger one greatly diminished, and its appearance and feeling altered for the better, while the superficial point of suppuration was discharging but little and the surrounding inflammation of the skin greatly subdued. Treatment was directed to be continued, and when I returned and examined the seat of disease ten days later, there still remained a small indurated nodule under the skin, but no soreness, no pain, nor other inconvenience, and to this condition it had been steadily approaching since my last previous examination. * * *

Book Notices.

System of Practical Medicine by American Authors. Edited by WILLIAM PEPPER, M. D., LL. D., Provost and Professor of Theory and Practice of Medicine, and of Clinical Medicine, University of Pennsylvania: Assisted by LOUIS STARR, M. D., Clinical Professor of Diseases of Children in Hospital of University of Pennsylvania. VOLUME II. *General Diseases* (Continued), and *Diseases of the Digestive System.* Philadelphia: Lea Brothers & Co. 1885. Sheep; 8vo. Pp. 1312. (By mail from Publishers).

We regard this "System" as of greater value to the practitioner than Ziemssen's *Cyclopædia.* This is saying as much as can be said of any existing work on Practical Medicine. When this "System" was "announced" by the publishers, however, we expected to find a work that would have been more thoroughly American than we have found this to be. For instance, in the 115 pages by Dr. J. Solis Cohen, on diseases of the mouth, tongue, tonsils, pharynx and œsophagus, of the over 150 foot-note references to authorities, only about 20 are to American books or authors; and yet in very many instances illustrations or suggestions of equal value to those borrowed from foreign writers could have been taken from American publications. The opportunity herein presented to record American observations could easily have been taken advantage of in order to have made more prominent the worthy American authors justly entitled to eminence without doing the slightest injustice to the subjects in hand.

The General Diseases not treated of in Volume I, are considered in this Volume II—namely, Rheumatism, gout, rachitis, scurvy, purpura, diabetes mellitus, scrofula and hereditary syphilis. Some 300 pages are devoted to these diseases. The remainder of the book is taken up with diseases of the digestive system—both organic and functional. The authors have mostly sought to enable the practitioner to recognize a given disease and then to instruct him how best to treat it. Among the articles deserving special mention of commendation are those on rheumatism, by Dr. Howard, of Montreal, diseases of the stomach, by Dr. Welch, of Baltimore, intestinal affections of children in hot weather, by J. Lewis Smith, of New York, the several papers on intestinal diseases, by Dr. Whittaker, of Cincinnati, intestinal obstruction, by Dr. McGuire, of Richmond, intestinal cancer, etc., by Dr. I. E. Atkinson, of Baltimore, peritonitis,

by Dr. Alonzo Clark, of New York, and intestinal worms by Dr. Liedy, of Philadelphia. But it may be that the articles just alluded to relate to subjects in which we now feel or have recently felt most interest, and hence to us have seemed deserving of this special mention. Every thing in this volume is good and useful: That, perhaps, would be the shortest way to express our opinion of the work. This "System" will long remain as standard; hence it should be procured by every doctor in general practice. The completeness of the index may be imagined when the reader is informed that it covers over 110 pages. The press work is not excelled by any publisher. All the publications of Messrs. Lea Brothers & Co., as also those of their century of predecessors, are remarkably free of typographical errors.

A Theoretical and Practical Treatise on the Hemorrhoidal Disease. By WILLIAM BODENHAMER. A. M., M. D. Illustrated by two Chromo-Lithographic Plates and Thirty-one Woodcuts. 8vo. New York: Wm. Wood & Co. 1884. Pp. 297. Cloth. Price, $3.00. (For sale by West, Johnston & Co., Richmond, Va.)

The author makes the point, in his preface, that notwithstanding the many monographs constantly appearing in this country upon almost every conceivable subject in medicine and surgery, there has been published no systematic treatise on the disease known as hemorrhoids, and taking advantage of this lack he has endeavored to present to the profession a work which shall, for the present at least, stand as an authoritative treatise on the history, nature, causes, pathology, diagnosis and treatment of this most common affection. This work presents what might be denominated a complete encyclopædia upon the subject, and the extensive range of information and study of the author has enabled him to make a standard book.

The disease in question being not only so common, but also involved in so much cloudiness as to its pathology, its subjects frequently do not receive from their medical advisers treatment properly adapted to a permanent cure, and consequently quackery thrives upon its victims to a greater extent, perhaps, than on those of any other disorder. If for no other reason than this—the protection of patients from the wiles of the advertising pile-doctor, etc.—every doctor that possibly can, should read this book. There is hardly any form of treatment which has in any degree proven successful that Dr. Bodenhamer has not presented here in plain terms. He has very little to say in favor of the cure of hem-

orrhoids by carbolic acid injection, at which we must confess surprise, our experience and that of so many surgeons in the West being so decidedly favorable to that method of operating. We firmly believe that nine out of ten cases of ordinary hemorrhoidal tumors can be cured in this manner. His favorite method, after forty-five years of experience, is still ligation by silk, and he fails to see what better mode can be adopted. We wish every doctor possessed this volume. C.

Elements of Surgical Diagnosis. By A. PEARCE GOULD, M. S., M. B., Lond., F. R. C. S., Eng., Assistant-Surgeon to the Middlesex Hospital, London, etc. 12mo. Philadelphia: Henry C. Lea's Son & Co. 1884. Pp. 534. (For sale by West, Johnston & Co., Richmond, Va.)

The publishers have called this a manual for students of medicine, but it is one of those books which are always valuable to the general practitioner, who so often has cases in minor surgery thrown into his hands. The work is deficient in one respect—if it may be called a deficiency—in that the diseases of the eye, ear, larynx, and the female pelvic organs, are not touched upon; but as nearly every specialist in America has written a full volume on one of these individual subjects, Mr. Gould may well be pardoned for this omission. The author states plainly that his idea is to furnish methods of readily recognizing the peculiar points in those cases of injury and disease which are commonly met with in the surgical department of an ordinary dispensary. He urges upon his readers—presuming them to be in the chrysalis (student) state—to particularly understand the great importance of a thorough knowledge of the *principles of diagnosis*, and he follows this advice with a most excellent presentment of that subject, showing how generally easy it is to make the necessary surgical diagnosis—if the proper method of observation is followed. The first four chapters, relating entirely to what we have mentioned, are not only the best in the book to the student, but, alone, make the work worth buying by the practitioner. The bulk of the volume is of course given over to a consideration of the diagnosis of special regions and portions of the body, and, with the exception noted above, the whole is as complete a work upon the titular subject as the profession may expect at present. C.

The Science and Art of Surgery. A Treatise on Surgical Injuries, Diseases and Operations. By JOHN ERIC ERICHSEN, F. R. S., LL. D., F. R. C. S., Ex-President of the Royal College of Surgeons of England and of the Royal Medical and Chirurgical Society, etc. Eighth Edition. Revised and Edited by MARCUS BECK, M. S. and M. B. (Lond.), F. R. C. S., Professor of Surgery in University College, London. With nine hundred and eighty-four engravings on wood. Vols. I and II. Philadelphia: Henry C. Lea's Son & Co. 1884. 8vo. Pp. 1124--1205. (For sale by West, Johnston & Co., Richmond, Va.)

The author—whose name has been for the last thirty years in every civilized country celebrated as that of an experienced teacher of surgery—has dedicated this complete work, in this edition, to the surgical profession of the United States, giving evidence of the esteem and friendship he holds its individual members in. He calls attention in the preface to the fact that notwithstanding his book is an epitome of British surgery, he has taken the utmost care to show his thorough appreciation of the great work done by American surgeons in past and late years in the advancement of the science.

Dr. Erichsen has felt that his work on surgery needed a full revision, and those of the profession—like the writer—who studied in their college days from the same named book, will be surprised to find how entirely modernized and changed the work we mention is. It is almost a new book, yet contains the same familiar flavor of practical work about it which characterized it in our student days. The author has taken great pains to make it almost an encyclopœdia of surgery, and the most modern methods of instrumental diagnosis and treatment are offered to the reader. Besides the addition of one hundred and fifty new and remarkably excellent engravings, many of the old ones have been re-drawn, and the re-written matter has been added to by many pages of original work, called for by the astonishingly rapid advance in this department of science made in the past few years. If any of our readers do not possess "Erichsen," we advise them to avail themselves of this thoroughly modern edition. C.

Intestinal Obstruction. By FREDERICK TREVES, F. R. C. S., Surgeon to and Lecturer on Anatomy at the London Hospital, etc. With 60 Illustrations. 12mo. Philadelphia: Henry C. Lea's Son & Co. 1884. Pp. 515. (For sale by West, Johnston & Co., Richmond, Va.)

This work on the pathology, diagnosis and treatment of the different varieties of intestinal obstruction, consists, in

substance, of the Jacksonian Prize Essay of the Royal College of Surgeons of England, 1883, and from the position held in British surgery by the author, it may be easily believed that the book contains the fullest information on this subject. His classification of the varieties of this affection he bases upon pathological grounds, for the very plain reason that much more is known of the morbid anatomy of obstruction than is known of its clinical history. A complete history of the pathology, and symptoms, and reference to the prognosis of the following classes is given: Strangulation of the bowel by bands, etc., volvulus, intussusception, stricture, obstruction by neoplasms, compression by growths outside the bowel, obstruction by gall stones and foreign bodies, by enteroliths, and by fæcal masses. Chapters are given referring to the general diagnosis of intestinal obstruction arising from all causes, which are clear and succinct; and those relating to the treatment—both operative and non-operative—of this condition, contain not only the recommendations of the author, derived from an extended surgical experience, but also those of the best authorities of modern days, save those of America, whom Mr. Treves leaves entirely out of the question, except to make a quotation from a quotation from Beard and Rockwell, and to throw doubt upon the value of massage employed in a successful instance by Dr. Gillette. The author evidently believes that nothing good can come out of Nazareth. This book is one of a series of clinical manuals designed for the use of both student and practitioner, and is a good volume for the physician to have at hand for practical reading. C.

Human Osteology. By LUTHER HOLDEN, Ex-President and Member of the Court of Examiners of the Royal College of Surgeons of England, etc. Assisted by JAMES SHUTER, F. R. C. S., M. A., M. B. (Cantab.), Assistant Surgeon to the Royal Free Hospital, London, etc. With Numerous Illustrations. 8vo. Sixth Edition. New York: Wm. Wood & Co. 1885. Pp. 276. Wood's Library of Standard Medical Authors; January. (For sale by West, Johnston & Co., Richmond, Va.)

The volume before us consists of a description of the bones of the human body, together with delineations of the attachments of the muscles, and the general and microscopic structure of bone-tissue and its development. In its way, and of its kind, the book is admirable, but the practical, busy doctor of our day who reads these pages, will feel that however excellent it is for reference (as we know all that Holden writes is), it is not exactly the work he might have decided

upon to begin "Wood's Medical Library," for 1885, with. The subscriber will recognize his own need for something more applicable to every-day use in his practice. As far as technicalities are concerned the book is a standard, rivalling in reputation the well known "Holden's Landmarks," but still, it is more adapted to the use of the anatomical and pathological student than to that of the physician in active practice. This edition is in some degree an improvement upon the last, a number of brief notes on comparative osteology having been added, several of the already excellent plates have been re-drawn to make them more perfect, and the descriptive order of the bones has been slightly changed. The practitioner who requires a refreshment of his knowledge of anatomy, both normal and microscopical, must have a work of this kind at hand, and, as we before stated, this book will be as well suited to his wants as any we now recall.

C.

A Practical Treatise on Massage—Its History, Mode of Application, and Effects, etc. By DOUGLAS GRAHAM, M. D., Fellow of the Massachusetts Medical Society. New York: Wm. Wood & Co. 1884. 8vo. Cloth. Pp. 286. Price, $2.50. (For sale by West, Johnston & Co., Richmond, Va.)

The matter of this book is the natural issue of an active practice, including the results afforded by fourteen hundred cases—some under the immediate observation of the author, and others reported from responsible sources. Since Weir-Mitchell so prominently brought before the profession of the United States the great therapeutic value of this method, no work has been published on the subject in this country to which this is not superior. It is precisely what its title calls for—a *practical* treatise on massage—and those wishing to fully understand the reason why this mode of treatment has so quickly established for itself such a reputation as a curative in nervous and other disorders, should by all means read it, and if possible, in connection with Weir-Mitchell's "Fat and Blood." The two volumes afford a sufficiently full conspectus of the subject referred to. Dr. Graham in his book gives an admirably full account of the history of massage, tracing the method down from the time of Homer, and adding much to the interest of the narrative by his pleasant style of treating the subject. His chapters on the mode of applying massage, and its physiological effects, are excellent and well repay careful perusal. Much attention is deservedly given to its employment in the neuræsthenia and

anæmia of women, where its best results have probably been observed, and two chapters are devoted to a consideration of its value where used for the internal organs of the body, especially the uterus. In that annoying disorder known as "writer's cramp," the author shows its good effect by the report of cases occurring in the practice of some of the best modern specialists, where the trouble has been entirely relieved by this method alone; and he furnishes full proof of the need of employing massage in cases of rheumatism, synovitis, sprains and joint affections, by unquestioned testimony. The reader will perhaps be somewhat surprised to find, on reading the last chapter, in how many instances of disease of the head, face, eyes and throat, this method of treatment may be adopted. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Irritation of the Sexual Apparatus as an Etiological Factor in the Production of Nasal Disease. By JOHN N. MACKENZIE, M. D., Surgeon to the Baltimore Eye, Ear and Throat Charity Hospital. [We think every medical man who reads this can, either from personal experience or observation, give corroborative evidence of the fact of a very close connection between the sexual organs and the nasal erectile tissue. It is greatly to be hoped that this paper will call out the experiences of others on this little studied subject, as it becomes in some instances an important one.] (Reprint from the *American Journal of the Medical Sciences*, April, 1884.) Pp. 7.

On the Diagnosis of Tumors of the Anterior Mediastinum. By JAMES C. WILSON, M. D., Philadelphia, Lecturer on Physical Diagnosis at the Jefferson Medical College, etc. [A full consideration of the morbid growths met with in a region of the body which text-books rarely refer to. A pamphlet to keep and bind.] (Reprint from the *Journal of the American Medical Association*, July 12, 1884.) Pp. 11.

The Relation of Diphtheria and Erysipelas to Puerperal Fever. By HENRY P. WENZEL, M. D., Milwaukee, Wis. [An interesting essay covering a very important and much discussed subject. The talented writer takes the ground that diphtheria and erysipelas can only transmit themselves alone, and do not give rise to child-bed fever.] (Reprint from the *Transactions of the Wisconsin State Medical Society*, 1884.) Pp. 15.

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LANDON B. EDWARDS, M. D..... .....WILLIAM H. COGGESHALL, M. D.

Original Contributions solicited from all sections; but the Editors do not hold themselves responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the editors. Rejected articles held one month at disposal of writer.

Editorial.

Meeting of Board of Visitors of Medical College of Virginia.

The Governor of Virginia has recently appointed Hon. John S. Wise, Capt. Tazewell Ellett—both of Richmond, Va.—and Dr. Wm. P. McGuire, of Winchester, to fill vacancies which have lately occurred in the Board of Visitors of this State institution.

At the meeting on June 4th, twelve of the nineteen Visitors were present.

Mr. George B. Harrison, after calling attention to the fact that the Faculty had failed to publish the list of Emeritus Professors, previously elected by the Board, introduced a resolution instructing the Faculty hereafter to publish said list in the official catalogues of the college. Carried.

Notes of acceptance of the title of Emeritus Professor, voted by the last session of the Board, were received from Dr. F. D. Cunningham, formerly Professor of Anatomy, and from Dr. Otis F. Manson, formerly Professor of Physiology and Pathology, which were received and filed.

A note from Dr. James B. McCaw was read declining to accept the title of Emeritus Professor voted him at the former session, because he did not deem the Board of Visitors competent to elect an Emeritus Professor except upon the recommendation of the Faculty.

Major Dooley moved that the report of the Dean of the Faculty, relating to receipts and expenses for the past fiscal year be received and adopted.

Dr. Lewis Wheat offered as a substitute that the Dean be requested to furnish an itemized report, as required by the laws of Virginia, stating receipts—sources and amount of revenues—and expenses; how many students, how many free, and how many pay students, how much tuition, was received from each, etc.

The motion of Major Dooley prevailed; but it was conceded that the charter granted the College in 1853–4 gave the right to any member of the Board to examine into the details of the Dean's report.

The Dean's report represents the College to be now in a hopeful condition of prosperity, and that the outlook for the coming season is very encouraging.

The establishment of the Virginia State Board of Medical Examiners will no doubt greatly benefit both of the State Medical institutions—the Medical College of Virginia and the University of Virginia.

Messrs. Wm. R. Warner & Co.'s Sugar-Coated Pills

Have received the first premium at the World's Exposition, New Orleans, on account of their great uniformity and solubility. This is the *ninth* World's Fair prize which attests to the excellence of the manufactures of this celebrated Philadelphia drug house.

Dr. John J. Caldwell's Removal.

Dr. Caldwell notifies us that he has moved from Baltimore to Dover Farms, Glyndon, P. O., Baltimore county, Md. Dover has been the family residence of the Johns family for the past century, and contains some 800 or more acres of the Worthington Valley limestone land. It is considered one of the most valued estates in Baltimore. We congratulate the Doctor in the successful issue through the highest court of Maryland which gives him hereafter an incontestable right to this property which has been in litigation for four years or more.

Medical Journal Addresses.

We have just received from the Illustrated Medical Journal Co., of Detroit, Michigan, several sets of their perforated, adhesive medical journal labels. The list includes besides the medical journals of the United States that are devoted to medicine, pharmacy and hygiene, those of the Provinces of Canada as well. Four complete sets will be mailed postpaid for fifty cents on addressing the publishers above named.

They are just what every physician needs for addressing his reports for journal notice, and medical colleges for addressing their announcements for a similar purpose.

The Sanitary Monitor.

With great satisfaction we have read the contents of the first number of this new journal. It is a Richmond enterprise, and the talented editor and proprietor—Dr. J. F. Winn—deserves great credit, not only for his determination to enter the ranks of journalism with such a much needed sanitary publication, but also for the style and general appearance of his journal. It is a monthly, printed in first-class manner on excellent paper, brimful of matter relating to hygiene and sanitation. At present it contains sixteen double-columned pages in each issue, but in consideration of the almost inevitable success with which it will meet—and which it so well merits—it will probably be enlarged in a few months. The subscription price is $1.00 per annum, or ten cents per single copy. It is devoted to the health of the individual, the family, and the public, and being entirely independent of any clique, institution, sanitarium, etc., is certain to attain a standing in journalism. Being the only sanitary monthly edited and published in the South, it should have a strong local support. Its merits will secure it a support in the North.

Medical College of Virginia Commencement.

This venerable State institution held its forty seventh Annual Commencement exercises at the Richmond Theatre, on the night of April 2d, 1885. An audience appreciative of the entertainment filled the building. Nineteen young doctors were floated off upon the professional sea, and it is greatly to be hoped that each one of their frail barks may reach the port of success within a reasonable period. Several prizes were presented for proficiency in the different departments of study—in each case fully deserved—and the final and best oration of the evening was delivered by Richmond's eloquent divine, Rev. H. M. Jackson, of Grace Episcopal Church. Every part of the exercises passed off pleasantly, and each graduate carried away with him agreeable recollections of the forty-seventh Commencement at his *alma mater*.

[This editorial note was crowded out of our columns last month.]

Medical Society of Virginia.

Just as we go to press, we are advised by a personal letter that it will be impracticable for the generous proprietor of the Alleghany Springs, Va., to entertain the Medical Society of Virginia until Tuesday, September 15th, 1885. Accordingly, the Executive Committee will have to fix upon this date for the opening of the Sixteenth Annual Session. All the Fellows and Delegates in attendance upon the session are to be the guests of the Spring's Management, and hence will not pay the hotel charges; and only weekly rates will be charged members of the doctors' families. The Executive Committee have used their utmost endeavor to have the meeting at a time suited to the wishes of a majority of the Society, and the time now announced is the best selection that could be made.

The Alleghany Springs is in Montgomery County, Va., about four miles from Shawsville, on the line of the Norfolk and Western Railroad, and is about sixty miles west of Lynchburg, Va. It is perhaps the most famous of the several celebrated Summer Springs resorts in Southwestern Virginia. A large attendance of the Virginia profession especially is confidently expected, and some from other States will no doubt be present.

The Recording Secretary will, in due time, issue the postal card notification required by resolution adopted at the last session, and will about August 10th issue the usual annual circular Announcement. In the meantime, it is earnestly requested that each member of the Society will prepare himself for the meeting in September, and that he will work among his friends not yet members and induce them to join. Dr. Saml. K. Jackson, of Norfolk, Va., is the President of the Society for the current year. The Editors of the *Virginia Medical Monthly* will also be glad to give any information in their power in answer to inquiries.

Deaths from Anæsthetics.

Dr. E. H. Jacob has collected the fatal cases coming under this head, occurring in England and Scotland during the year 1884, and has presented them with some detail in a recent number of the *British Medical Journal.* He finds that nine deaths were due to chloroform, six to ether, and three to a mixture of chloroform and ether. Peculiar note is taken of the fact that the deaths caused by the first named anæsthetic took place during slight operations, the patients being comparatively healthy, while those occurring under

ether were in the course of serious operations (three ovariotomies), the element of shock being naturally present. Despite this showing, we of the South still hold that chloroform, properly employed, is decidedly the most desirable anæsthetic in this section.

Prof. John Staige Davis.

We regret to announce that since our last issue this much beloved and distinguished professor of the University of Virginia has suffered a repetition of the paralytic stroke which makes him almost hemiplegic. Hence our hope for his restoration to sufficient health to resume his duties next Fall in professional work is dispelled. His affliction is a severe stroke upon a large circle of friends throughout the United States, and his loss to the University will be sorely felt.

Virginia State Board of Medical Examiners.

We have had intimations that there are some practitioners in Virginia rebelling against the State law which requires that they shall first secure certificates from the State Board of Medical Examiners before undertaking practice in Virginia. One or two court clerks indeed have even refused to recognize the law. We forewarn all such parties now that they are violating the law, and that after a due amount of tolerance has been exhausted they will be arrested and made to test the constitutionality of the Act of the General Assembly. The Medical Society of Virginia has been contending for a State Board of Medical Examiners since 1870, and now that the law has been secured, the Society will not silently permit violations. Fortunately, the present Board of Medical Examiners is composed of gentlemen who have the interests of the profession at large at heart, and have determination and influence enough to bring offenders to justice. Twenty-eight States and Territories now have State or Territorial Examining Boards, and it will not be long before all the other States will have like protections against imposters and incompetent pretenders.

Dr. J. Edgar Chancellor,

of University of Virginia, who during the past Winter has been filling the Chair of Obstetrics, etc., in the University of Florida, at Tallahassee, passed through Richmond a few days ago, looking well and speaking cheerfully of his Southern trip. He was on his way to Rockbridge Alum Springs,

Va., where he will remain during the Summer as Resident Physician, in the place of Dr. J. S. Davis, who is prostrated by illness. He expects to attend the session next September of the Virginia Medical Society of Virginia, of which he was the last President and is now an Honorary Fellow.

Dr. Francis D. Cunningham.

During the last week in June, this distinguished Virginia surgeon and physician paid a visit of a day or two to his home in this city. He has been ill in Philadelphia for some weeks, but under the attentive care of Dr. Da Costa, he is now able to travel short distances. He proposes to make his Summer home at Rockbridge Alum Springs, Va., for the recreation of his health. We wish him speedy restoration to his accustomed health and a return to the active duties of a practitioner in our midst.

Doctor's Bills Collected in Texas.

Dr. Blister presented his bill of $150 to Moses Shaunburg. Moses was shocked at the amount. "Vy, mine got, two funerals in dot family would not haf cost me so mooch as dot." "It is not too late to have a funeral yet," returned the Doctor, as he brought out an army-size revolver. Moses took the hint.—*Texas Siftings.*

University of Virginia Graduates.

At the Final Examination of the Medical Department of the University of Virginia, which was celebrated July 1st, 1885, the following class of eleven graduated as Doctors of Medicine: M. M. Bannerman, Mansfield, La.; P. B. Green, Everett, Pa.; G. H. Mallett, Brooklyn, N. Y.; R. D. McIlwaine, Petersburg, Va.; George M. Magruder, Keswick; J. P. Munroe, Fayetteville, N. C.; T. M. Norton, Alexandria, Va.; W. W. Owens, Savannah, Ga.; E. L. Tompkins, Richmond, Va.; W. H. Wilmer, Mobile, Ala.; Edgar Woods, Jr., Charlottesville.

We are glad to learn that the outlook for next session is specially encouraging. We know of no institution from which a diploma is of more true significance as indicating the real standing of the student.

Obituary Record.

Dr. J. Newton McChesney.

This talented young man died of phthisis, at his mother's residence, in Staunton, Va., on the night of June 3d, 1885, at the early age of thirty-three years. After graduating in medicine at the University of Virginia, he attended the Medical School of the University of New York, and soon after received an appointment at Charity Hospital as interne. He will be best remembered by the reading members of the profession, as the author of the best journal article on Variola which ever appeared in America. It was published in the *Medical Record* a few years ago, running through two or more numbers, and from its thoroughness and practical suggestions attracted much attention, most deservedly. Had his life been spared he would, no doubt, have attained an extremely high place in our calling, and added another name to the roll of honor of Virginia's brilliant medical men.

We append, by request, the following preamble and resolutions, adopted by the Manhattan Medical and Surgical Society:

"At a regular meeting of the Manhattan Medical and Surgical Society of New York, held June 6th, 1885, the following preamble and resolutions were adopted:

"WHEREAS, It has pleased an All-wise Providence to remove from our midst our friend and colleague, Jacob Newton McChesney, M. D., be it therefore

"*Resolved*, That this Society and the medical profession have sustained the loss of a most active, earnest and useful member.

"*Resolved*, That we, his associates, mourn the loss of a warm-hearted and faithful friend.

"*Resolved*, That we extend to his bereaved family our sincere sympathy in their affliction.

"*Resolved*, That on a page in the minutes of this Society be inscribed his name and the dates of his birth and death; and that these resolutions be published in the New York *Medical Record* and in the *Virginia Medical Monthly*; and that a copy of them be sent to his family."

(Signed), CHAS. W. ALLEN, M. D.,
T. F. GAUNT, M. D.,
A. M. LEON, M. D.,
WM. S. LEAMANS, M. D.
} *Committee.*

VIRGINIA
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RICHMOND, AUGUST, 1885.

Original Communications.

ART. I.—**Boro-Glyceride.*** By W. THORNTON PARKER M. D., A. S. Surgeon U. S. Marine Hospital Service etc., Cape Charles Quarantine.

A very interesting communication from Vienna, concerning the use of iodoform in Professor Billroth's Clinic, which appeared in the *Medical Record*, February 7th, 1885—has induced me to bring into notice, for the *fourth* time, the valuable antiseptic properties of boro-glyceride. We are informed that Prof. Billroth considers iodoform the "best and most antiseptic," and prefers it to the hydrargrum bichloridum because the latter discolored the instruments and destroyed their polish, and Professor Billroth takes the utmost care of his instruments. By constant use of the bichloride, even in weak solutions, the hands of the operator soon become unfit for delicate operations where a nice sense of touch is required. The skin on the hands and especially about the tips of the fingers is hardened, cracked, fissured and sore. But the principal objection of Professor Billroth was that many cases of mercurial poisoning had occurred with the use of this antiseptic. *Some of these cases had resulted fatally.*"

*See *New York Medical Record*, Sept. 23rd, 1882; *Amer. Journ. of Obstetrics*, Febry. 1884: *Philadelphia Med. Times*, Sept. 20th, 1884.

So much for the *hydrargyrum bichloridum* antiseptic. Personally, I have had little experience with it, because I never had the *least confidence in it*, neither did I believe that the theory of its being an antiseptic at all was ever founded on a solid basis. Billroth, to lead in the wholesale denunciation, is indeed the beginning of the end "of its short existence."

Of the three great antiseptics, carbolic acid is undoubtedly superior to either the bichloride of mercury or the iodoform; and Billroth, with all his confidence in iodoform, uses the carbolic acid *also*. "Before applying any dressing, the wound and the parts surrounding it are always thoroughly irrigated with a one per cent solution of carbolic acid." This little fact proves that the great surgeon has some lingering doubt about iodoform being the best antiseptic, and even clings to the bichloride, in combination with iodoform in some operations. Professor Carl Braun, in a Porro operation (reported in the communication from which I have been quoting), used a combination of iodoform and bichloride. An antiseptic, to deserve the name, and to command confidence, must be able to *stand alone*, must be able to protect the patient from external dangers, and render the use of poisonous substances like carbolic acid, iodoform and hydrargyum bichloridum *entirely superfluous*.

In the use of boro-glyceride, we have all that can be desired as an antiseptic—*safety and deficiency*. It has been shown that the bichloride does not supply either of these desirable conditions. Concerning iodoform, our informant writes that, "In almost all of the operative cases in the surgical wards, within twenty-four hours a yellow color appeared in the urine, a slight odor of iodoform in the breath, and a faint taste of iodoform was present." Cases of *poisoning* were characterized by gastric symptoms, increase of the above symptoms, slight nausea and vomiting and headache. "The severe form of iodoform poisoning usually proves fatal."

As an old pupil of Professor Billroth, I cannot restrain my surprise that, with these facts recognized, iodoform should be considered the best antiseptic. Certainly these are very dangerous, and, to say the least, highly unfavorable symptoms to follow the use of the "best antiseptic." And the worst

of it is, that these statements are *true*; nay more, they under estimate the dangers of this antiseptic. In Professor Brun's surgical wards in Tubingen, where, in 1882, the iodoform craze was at its height, the poisonous effects of iodoform were everywhere present and commented on. I have to my own satisfaction, in many European hospitals, proved the danger to be expected from iodoform, and I dread it more than carbolic acid, but not so much as the evils I have feared in the use of the bichloride.

Not only is the wound surface poisoned, and the patient depressed by the use, but the air of the entire ward is injured by the presence of even one case treated by iodoform. Every surgeon recognized the importance of the largest supply possible of fresh air. What can we expect with the surgical ward stinking with iodoform? If we must employ one of the three great antiseptics, let us return to that used by the inventor and profector of antiseptic surgery, Lister, and use his carbolic acid. In boro glyceride, we have a remedy *safe* and well known, and if properly selected and applied, no results could be more satisfactory to patient or surgeon. It is not fair to condemn it because it is *expensive*. Its use as an antiseptic is thus described by Dr. Barwell, Senior Surgeon of the Charing-Cross Hospital, in the '*British Medical Journal*,' Aug. 26, 1882:

"The operation completed, the wound is thoroughly mopped and sponged with a five per cent. solution of boro-glyceride in water, or in case of a cup-shaped wound, I fill it with the solution.

"After this wound is stitched, it is covered with eight or ten layers of lint, and when necessary, as in amputations, also with a light bandage, similarily soaked. The whole is then enveloped in thin mackintosh (gossamer rubber cloth). If no oozing takes place, there is no need for dressing again for three or four days—sometimes for more. When the dressing is moved, all parts of the wound, when the lips have been adjusted, are found united or uniting, according to the time elapsed—the surrounding skin being free from redness or irritation; it is, on the contrary, soft and white like that of a baby."

"In the Charing Cross Hospital, I had the opportunity of comparing the carbolic, iodoform and boro-glyceride surgi-

cal dressings. It is fair to say that the worst cases were given to boro-glyceride, but with the most gratifying results. The wounds have a healthy and cleanly appearance, healing rapidly, and the whole condition of the patient seems to be better under this mode of treatment."—*W. Thornton Parker, M. D., in "Medical Record."*

The proportion useful in surgery is one part of boro-glyceride to twenty or thirty of warm water. Such a solution is inodorous, has a slight saltish taste, and is quite unirritating to a wounded surface. Under its use, wounds of all kinds do extremely well, and heal fully as readily as under carbolic acid dressings, over which boro-glyceride has the advantage that it does not irritate the wound or the surrounding skin, and that it is, so far as is known, entirely innocuous when applied to a wounded surface.

In the *Philadelphia Medical Times*, September 20th, 1884, I have taken occasion to warn those who intend to experiment with the new, and as I believe, *really best* antiseptic—to procure only the *best*. There are many preparations of boro-glyceride for sale and few of these are worth using. By using inferior preparations, surgeons have been discouraged and have reported unfavorably.

If I have not been misinformed, much of the delay in bringing boro-glyceride into general use has been caused by the grasping demands of the inventor for "royalties" in its manufacture. So much has been asked on this account, of our American chemists, that they cannot afford its manufacture, and without paying royalty they are of course liable to prosecution. To remedy this, it has been proposed to coin another name for a mixture of boracic acid and glycerin. If boro glyceride is the valuable antiseptic it is claimed to be, the obstacle to its use in this country should be speedly removed. It has certainly proved itself already as excellent as either of the three reigning antiseptics, with the advantage of possessing *none* of their dangerous properties.

Pompous Doctor.—At bedside of wildly delirious patient: "Why did you delay sending for me until your husband was out of his mind?" "Och, Herr Doctor, do you suppose he would ever have sent for you while he was in his right mind?"

ART. II.—**Eroto-Mania, or Insanity in Relation to Impotency, and its Treatment with Damiana, Coca, Bromides, Atropia, Nitro-Glycerine and Electricity.** By JOHN J. CALDWELL, M. D., Neurologist, Baltimore, Md.

ERECTILE TISSUES.—We should first consider a few anatomo-physiological facts.

It is often difficult to give a definition which will convey a clear idea of what we desire. Under such circumstances, we resort to more extended descriptions. When the genital organs of the male or female become enlarged, turgid and firm to the touch from excitement, we say they are in a state of erection, and the organ is composed of *erectile tissue*. This is merely a physical description. When we further examine this tissue during erection, it is found to be full of blood. This is merely the physical condition, and conveys no idea of the anatomical structure of the parts, nor the accessory condition necessary to a state of erection.

It was natural to suppose that erectile tissue is confined to the genital apparatus of the male and female, and such seems to be the opinion of Boeckel and Robert; but when the anatomical structures came to be carefully examined, other views had to be adopted. Perhaps no better illustration of the fact insisted upon—viz: that function depends upon structure—can be adduced than by the study of erectile tissue. It will be found that erectility depends upon the peculiarity of tissues and their arrangement—the chief elements concerned being vascular and muscular, which are presided over by nervous tissue, which receives its power from certain portions of spinal nervous system. The vascular tissues are arterial and venous, whose structural arrangement is peculiar, so that blood may flow to the parts, and be impeded in its return. It appears that, in order to effect this result, muscular tissue of a peculiar structure and arrangement is necessary. When in a state of erection, the sensibilities of the parts are in a state of excitation. There is great vascular and nervous excitement—exaltation. Hence there is a sudden and remarkable accumulation of blood in the tissues, which is the immediate cause of the erection. The return

of blood is prevented, and the erection continued on account of the peculiar mechanism of the tissue itself; pressure is exercised on the veins or sinuses by bands of muscular fibres, so that there is an accumulation of blood which has been rapidly conveyed to the parts through the arteries. These muscular bands are supplied by nerves, in much the same way as the vessels—from centres located in the spinal cord, and are often called *nervi-erigentes*. It follows that whenever we find the peculiar arrangement of the peculiar tissues, we have tissue capable of erectility—we have erectile tissue.

It will be seen that this kind of tissue is not confined to the genital organs, although here we will find it in greater quantities and most clearly to be determined by the anatomist. Erectile tissue exists in the walls of the vagina, in the uterus (which we regard an erectile organ), in the extremities of the Fallopian tubes, and in the rings of the ovary. It exists likewise in the iris and in many other parts of the body. In all, the property of erection depends upon the peculiar arrangement of the vascular, muscular and nervous tissues.

With these prefatory remarks, I shall introduce reports of some instructive cases of impotence and sterility which I have mostly successfully treated. The cases are numbered according to the arrangement made of them in my note-book.

Case XVI.—*Permanent Impotency from General Debauchery.*

Mr. J——, aged 65, a wealthy bachelor, had hereditary tendencies to insanity, which condition was thoroughly developed under debauches of every description of many years standing, or, as he termed it, "thirty years a drunkard," and an inveterate consumer of tobacco. He actually ate the weed night and day. His venery was prolonged and frequent until towards his latter years, when he became impotent—totally so. This was followed by severe melancholy and recluse, with periodical spells of the highest exaltation and personal abuses. In these spells he would resort to bawdy houses and order several of the inmates to be stripped before him, to drink freely of champagne, and to perform all sorts of bawdy antics. With all this, he was yet not happy, for he was impotent; his genitals were prostrated and flabby beyond any recovery. The lesions of the brain, the spinal

cord, of the solar-plexus and of the sympathetic were permanent and progressive. These excesses would last from one to two weeks at a time; then, disappointed, he would become melancholic or choleric, or phrenzied and demoralized, and would seek an inebriate retreat for rest and treatment for weeks or months duration—terribly repentant, terribly melancholic, suffering all the torments of the damned, hating his own blood and kin, swearing he was the "black whore" that the seventeenth chapter of Revelations describes, and that he was doomed to kill himself and go to hell. Therefore he executed himself, for he committed suicide about four years ago.

He had been under treatment of Dr. Wm. F. Stewart, of Harlem Lodge, and myself ten years previous to his death. When under our control, many of his symptoms were greatly amenable to treatment. For instance, his insomnia would kindly yield to the bromides and chloride of gold; his melancholia and forebodings were much benefited by coca and damiana; his dypsomania was greatly stayed with draughts of hot beef-tea flavored with capsicum. But as to the "bee in his bonnet," and the lesions of the genito-urinary centres, they were fixed and permanent.

CASE XVII.—*Temporary Impotency from Nervous Exhaustion.*

Mr. W——, aged 25, single, tall, active, and well-developed, employed upon our daily press, had suffered for several years from frontal pain and depression, general nervous exhaustion, with periodic spells of fearful melancholy, with suicidal tendencies. He had to leave his vocation and seek asylum treatment, for some unexplained neural or mental disorder, his friends thought. After several experiences of this kind of treatment, he was referred to me. Upon examination, his urethra proved to be irritable with a gleety discharge, with two strictures located in the fixed part of the canal. These were dilated gradually, while his nervous symptoms were treated upon general principles, using sedatives or tonics, as circumstances required, until a gradual and final recovery occurred. His mental troubles proved to be purely reflex.

CASE XVIII.—*Impotency from Neglected Gonorrhœa.*

Mr. O——, aged 26, suffering from prostatitis and continued loss of prostatic fluid, dripping away from the penis upon his underwear. The case was one of trouble originating from long-neglected gonorrhœa, and exposures to cold

and unhealthy locations. His symptoms were pain and tenderness about the perineum, with a sense of heat and frequent efforts at passing water. He had pain on defecation; feeling of weight about the perineum and rectum, experienced when passing the catheter. I ordered, as treatment, rest, warm baths, and used belladonna applications to the perineum; bromide in milk as injections per rectum; simple nourishment without stimulants; all this until the acute stage had passed. Then I placed him upon damiana pills (Parke, Davis & Co.'s) as an alterative and tonic, which treatment was continued for several months, when all his unhappy symptoms had disappeared.

CASE XIX.—*Impotency from Spermatorrhœa.*

Mr. D——, aged 24, complained of the loss of seminal fluid, night and day, and particularly after he passed his water or fæces. He attributed the cause to masturbation, and from his appearance I judged he was correct. He suffered much from general weakness, nervous irritability and a dreamy, absent manner, flatulence and constipation, dullness of sight and perhaps of hearing, weakness of memory, attacks of palpitation, giddiness, headache, and neuralgia. He would lie abed for a weak or two at the time, and fast for days without speaking to any one. This condition existed more than a year, when his father, fearful his son was about to lose his mind (judging from eccentricities), called my attention to the case, when I obtained this history.

I placed him under the best hygienic influences, and required daily calls at my office, when I used moral suasion and encouragement, and endeavored to instil better ideas and more manly actions, to imbue him with brighter hopes for the future. I also instructed his family to use every effort to make home attractive and pleasant to him.

Happy home influences surrounding youth is a matter most worthy of earnest solicitude, attention and study; and were it more generally inculcated throughout our land, how many young and gallant wrecks might be saved upon the ocean of every-day life!

I administered the different preparations of damiana with entire success. Though it required better than a year to complete restoration mentally and physically.

I would here note the fact that preparations containing gum and resin solutions are more agreeably taken with milk, and more readily assimilated. I also find the bromide salts to

be more readily taken and to give better results when held in solution of milk.

CASE XX.—*Sterility from Amenorrhœa.*

Mrs. B——, aged 28, suffering from amenorrhœa, has been married several years, but had no issue; as a consequence, was unhappy and anxious. She had excessive leucorrhœa, though she was apparently robust and healthy; cheeks rosy; still she complained of nervous irritability, and a dreamy and absent kind of manner. I advised a better hygiene, moderate mental and bodily work, cheerful society, to avoid heavy meals, and to sleep on a hard mattress, and alone during treatment. Medically, I ordered fluid extract of damiana, teaspoonful-doses in milk, three or four times a day; to omit tea or coffee and other stimulants; to drink freely of milk or buttermilk. After pursuing this treatment two or three months, all her symptoms improved; she became perfectly regular in her menses, became pregnant, and was delivered, at the end of a regular time of a healthy boy.

CASE XXI.—*Impotency from Grief and Reverses of Fortune.*

Mr. C——, aged 45, suffering from seminal loss, due, as he said, to grief and sad reverses of fortune. The penis was small, cold and flabby; otherwise there was no lesion that could be found. His symptoms were as follows: General debility, with some emaciation; also much nervous irritability; complained of dullness of vision, and of poor memory; bowels constipated and flatulent, with occasional attacks of giddiness, headache, and palpitation. In his case I suspected excessive venery, as he informed me he had lately been in the habit of keeping a mistress who was very amative.

The treatment of his disease was rest, a change of scene, nourishing diet, as the hygienic measure; medically, Messrs. Parke, Davis & Co.'s damiana and nux vomica pills, which was continued through the months of June and July with the best results, for his seminal losses ceased; he grew better in flesh, and better mentally. A few weeks since he came to the city for the treatment of general rheumatic and neuralgic pains, which yielded kindly to quinine and electricity. He had been visiting a malarial district. His old trouble, spermatorrhœa, had entirely disappeared. The characteristic effects of damiana—viz: alterative effects on the alimentary canal and the tonic effects upon the genito-urinary organs—were decidedly manifested in his experience with this drug.

It will be well at this juncture to call the attention of the profession to the remarkable and beneficial action of this drug (damiana) in the various unhealthy or irregular discharges of the genito-urinary organs, in the female as well as the male. Several of my medical brethren have strongly testified in its favor in the treatment of sterility, where the uterus and its appendages seemed to suffer from inertia. I have found it an excellent remedy in cases of amenorrhœa, dysmenorrhœa, and leucorrhœa. Spermatorrhœa is a deranged state of mental and bodily health, due to too frequent escape of seminal fluid. Masturbation is the most common cause. The symptoms may be a separate escape of seminal fluid; or this may be associated with morbid changes in the vesiculæ seminales, ejaculatory ducts, bulbous portion of the urethra and prostate gland. Urine is sometimes rendered slightly albuminous by seminal fluid.

CASE XXII.—*Impotency due to Stricture and Catarrh of the Bladder.*

Mr. N. R., aged 25, suffering with loss of copulative power. Upon an examination of the urethral tract, the sound was arrested by two strictures at the prostatic portion of the urethra. The neck of the bladder was found irritable with excessive mucous discharge. The strictures were gradually dilated by the appropriate instruments for that purpose. The bladder was washed out daily by a double silver catheter, using as a wash a weak solution of atropine. Internally, I administered Parke, Davis & Co.'s fluid extract of gelseminum with bromide of sodium. This treatment was continued until the acute symptoms had subsided, when Parke, Davis & Co.'s fluid extract of damiana was administered. The sound was passed daily, through which a constant current of electricity was passed from the sacrum to the end of the sound. In all, this treatment lasted about a year. Since then the young gentleman has married and finds himself fully able to do family duty.

CASE XXIII.—*Impotency due to Neurasthenia.*

Mr. R. J., aged 54, complained of a gradual loss of health, weight and genital power. Here we failed to discover any lesions of the genital organs. He seemed to be a case of general neurasthenia from debility of digestion and assimilation of several years' standing, which yielded kindly to

local and general faradization after a few months' treatment. But his genital organs being still weak and impotent, we placed him on liberal doses of Parke, Davis & Co.'s fluid extract of damiana, which acted like a charm after a few weeks' administration. The first effects were to cause two full, mushy stools per day, accompanied by an increasing appetite, and finally a restoration of his lost sexual power.

CASE XXIV.—*Impotency due to Business Troubles.*

Mr. D——, aged about 50, called concerning indescribable pain or sensation about the head, with a loss of power, and a desire for sexual connection; attributed it to great and continued trouble in his business relations. On examination I failed to find any lesions of the genito-urinary organs or functional disturbance of his alimentary canal. Indeed he seemed in all respects a fair specimen of health, with the two exceptions named. I ordered him free use of Parke, Davis & Co.'s damiana pills, and occasionally when the pain in the head was severe, applications of the constant current of electricity to the nape of his neck, down the spinal column. His treatment was continued several weeks with very fair results, though his business troubles were still on his mind.

CASE XXV.—*Impotency due to Excessive Venery.*

Mr. G. W., a young gentleman of wealth and somewhat "roué," called at office. He was the picture of health, aged about 30, complains of a failure in his efforts at copulation, owing to a partial loss of erectile power. On examination, I found the history of excessive venery only. The sound exploration failed to discover either stricture or tenderness of the urethral tract, all other functions being normal. I advised him rest for two weeks. After due trial he returned, reporting treatment so far a failure. I then placed him on Parke, Davis & Co.'s damiana pills, together with a generous diet and a respite from all genital exercise. After ten days of such treatment he reported himself fully re-habilitated and fully potent.

COMMENTARY.

"Reduced sexual power, from whatever cause it may arise, is one of the most distressing maladies, and is therefore entitled to the deepest sympathy and consideration on the part of the honest practitioner, by whom unfortunately, it is rarely discussed."

When the intimate connections which exist between the urethra, the prostate gland, the seminal vesicles, the ejacu-

latory and deferential ducts, and the tubes are remembered, it is not surprising that lesions of that passage should exert a powerful effect upon the functions of generation—whether that effect be due to the extension of morbid action through continuity of stricture, or to reflex action. Hence it is that many persons afflicted with urethral disorders suffer from more or less marked disturbance in their sexual power, amounting, in some instances, to impotence, or inability to copulate, either from inability of introcession or premature ejaculation. Both states are associated with imperfect and transient erections—in many cases dependent upon stricture, inflammation and hyperæsthesia of the posterior portion of the urethra.

So frequent reference has been made in this paper to the preparations of damiana by Messrs. Parke, Davis & Co., of Detroit, Mich., because there are so many spurious or adulterated preparations of the plant on the market, that it impairs confidence in the drug. I have got in the habit of prescribing many of the preparations sent out by this firm, because I have not been deceived as to their genuineness and reliable strength.

Clinical Reports.

Value of Viburnum Prunifolium (Black Haw) in Threatened Abortion Complicated with Pneumonia. By WILLIAM H. COGGESHALL, M. D., Richmond, Va.

On Monday evening, February 8, 1885, I was called to see Mrs. R——, aged twenty-five years—wife of Robert R——, teacher. She had been married about six years, during which time she had suffered from two accidental miscarriages—the writer being the medical attendant in both cases. When I first saw her in this sickness—Monday night, 11 o'clock—she was in a high stage of fever. Her husband and she described the initial chill which had occurred during the early afternoon, and the characteristic pain in the breast under the nipple on the right side extending through the chest to a point under the scapula. The ensuing fever, even

at first, as stated, was high, rising to 103° Fah., on the second day after the chill was felt, and the patient, being of small build, and temperament decidedly hysterical, was exceedingly ill. Her tongue, at first red and dry, was soon covered with a thick coating, which, as the disease progressed, became brown and typhoidal in appearance.

Soon after I had been called to attend the case I found that the lady was—as nearly as could be judged—between seven and eight months advanced in pregnancy, and the trouble naturally anticipated soon began. Pneumonia, complicated by the condition of well advanced pregnancy has—in the few instances the writer has witnessed it in his own practice heretofore—invariably proven fatal.

To return to this clinical history: On the 10th February, the third day after illness, the patient complained of grinding pains across the lower abdominal tract, at the same time exhibiting signs of increased exudation in the right lung. On the succeeding day that lung was thoroughly hepatized as far as physical signs would denote, and the grinding pains began to increase in frequency, and somewhat change their character to those more serious. Feeling that in the feeble condition of the patient—due to the shock from full pneumonic invasion, etc.—labor would certainly be attended by fatal results, I placed the patient at once, when symptoms indicative of such treatment first appeared, upon full doses of opium, endeavoring to prevent further uterine contraction, but, considerably to my surprise, the opium simply proved a nervous excitant, certainly doing more harm than good, as her nervous system seemed particularly affected by the drug—hysterical and almost cataleptical convulsions ensuing on its employment. The pains and the uterine movements were certainly not diminished; if any change was made they were increased, in sympathy with the general excitation of the system.

During the first five days all the narcotics and usual uterine sedatives were tried, without avail—opium, hyoscyamus, belladonna, cannabis indica, and one or two other drugs of much the same action—but none seemed of sufficient value for its use to be continued. The case by this time (fifth day) had become desperate. The patient—with a temperature of 104⅜° Fah., a pulse ranging between 120 and 145, often thready and always weak, intense cephalalgia, anorexia and great thirst, the general pulmonic symptoms characteristic of pneumonia of one lung, occasional hysterical convulsions, with a tendency at all semi-rational times to bid an

adieu to the world and an earthly farewell to friends, (being well encouraged in these latter feelings by sympathizing kinsfolk), and above all the irregularly continued uterine pains, giving me the impression every time I left the house that I would be recalled within an hour or two to find her in actual labor—was decidedly if anything but an enviable condition and her medical attendant was in very much the same state. While everything remained in this unpleasant plight, one of the best physicians in this city advised me to try *viburnum prunifolium*, as he had used it in a case very much like the one in question, where, although the patient died from exhaustion, he was satisfied good resulted from the administration of the drug. He had no question as to its value in ordinary cases of threatened abortion, as he had employed it frequently. The remedy in question I had used, but only a few times, in the latter condition, almost invariably prefering the more certain opium. As I had not only employed all the different drugs which seemed indicated in the present case without any specific effect, but also had the fact staring me in the face that my patient was in extreme danger, I gladly accepted the advice, and began the use of viburnum, in thirty (30) minim doses, with glycerin and peppermint water, every three hours, as follows:

℞. Ext. viburn. prunifol. fl.....ʒij.
Glycerin.....ʒss.
Aq menth. pip.....ʒjss.
M. Sig.—One teaspoonful every three hours;

employing, of course, at the same time, the best treatment experience had taught me for the pneumonia, and supporting the strength of the patient with "Beef Peptonoids," and necessary diffusible stimulants. For two days after this specific treatment was commenced she rested on the narrow boundary line which defines the regions of life and death, but even during this time—certainly after the fourth dose—the effect of the black haw was decidedly manifest, as the grinding and other uterine pains which had not only denoted coming labor, but were also seriously reducing the physical power of the patient to battle with the inflammatory disease, gradually became less, and by noon of the seventh day had entirely subsided. The pneumonia had now about run its course and the uterus being quiet, the strength of the patient (speaking comparatively) was built up by stimulants, milk, Beef Peptonoids, etc. Never have I seen a more remarkable recovery from the extreme illness and prostration of a severe pneumonia.

Eighteen days after the initial chill of the acute disease, while sitting in an easy chair before the fire, the premonitory symptoms of true labor set in, and I was hurriedly called at four in the afternoon. After a fairly normal parturition, at one o'clock the next morning a dead female child was delivered, the secundines following with little hæmorrhage, or less trouble either to patient or accoucheur. Convalescence soon ensued, leaving the young lady in general good health, except that a weak lung rendered necessary more than the ordinary precautions against a "Spring cold."

The object of the writer in noting the above case was entirely to call attention to the usefulness of viburnum prunifolium (black haw) in just such cases. He has always been somewhat sceptical in regard to its reported specific results in threatened abortion, especially when the latter has been complicated with inflammatory action; but in this reported instance, its remarkably happy effect in quieting the uterine pains and nervous hysteria, after the failure of all the other drugs generally employed in such instances, proved conclusively to the writer that he had long neglected an important weapon in the battle with disease. One of its excellent qualities is manifest in the fact that it can be given in almost any prescription combination. It is easily administered with potash, chloral, opium, aconite, hyoscyamus, veratrum viride, the ammonia salts, or any other medicine which is likely to be used in the lying-in room, and as a rule, its effects are immediate and positive. In general, it is one of the few remedies in our materia medica that can be relied upon to do the work expected of it. As a controlling agent in the pains and symptoms of threatened abortion it has no superior and few—if any—equals, (always provided a good article is used.) Unfortunately it has not been employed as frequently as its merits deserve, although a favorite remedy with some practitioners, but we fancy the time is not far distant when it will be better known for what it is—the anti-oxytocic *par excellence.*

416 *West Clay street.*

Spasmodic Asthma due to Fatty Tumor of the Neck. Removal. Cure. By B. C. KEISTER, M. D., South Boston, Va.

During September, 1884, I was summoned to attend a lady in the country for a supposed case of "spasmodic asthma." The husband came in speedy haste for his family physician, and finding him absent, came to my office in a very excited state of mind and told me that in the absence of his family physician he wanted me to see his wife as soon as possible, stating that she was in one of her old attacks of asthma and that he had fears of her recovery.

I, of course, responded to the summons as promptly as possible. On entering the house and approaching the bedside of the patient, my attention was at once arrested by the peculiar breathing of the patient. It was of that peculiar, hissing sound characteristic of membranous croup. I felt a degree of satisfaction in my own mind that the breathing was not of an asthmatic character, but, on the contrary, pointed to some obstruction along the trachea.

With these considerations on the present condition of things, I at once directed the mother of the patient to remove all the clothing from about the patient's neck in order that I might be able to examine and ascertain the cause of her hard breathing. While the mother was thus carrying out my directions to make the neck bare for an examination, the patient turned her head over to one side and at once stopped her hard breathing and said that she felt somewhat better. This at once clinched my diagnosis, but I proceeded to examine the neck, and to the surprise of all that were in the room, I found a fatty tumor situated at the margin of the clavicle and under the sterno-cleido mastoid muscle. Although buried very deep and situated under the margin of this muscle, I could feel it very distinctly and move it about with a very small amount of pressure with my fingers. I then turned the patient's head by way of experiment and found to my full satisfaction that the tumor was the whole cause of the supposed asthmatic attacks and loud breathing.

Satisfied with my diagnosis, I of course advised the patient to undergo an operation for the removal of the tumor. This of course struck her with surprise as well as her many sympathizers. But this did not lessen my determination, however, provided I could succeed in getting her consent to operate. After much talk and persuasion, I finally got her consent to operate on my next visit. So on my next visit,

accompanied by my friend Dr. Beckett, I extracted the tumor, which was about the size of an ordinary turkey egg. The patient stood the operation all right, and she is now entirely well and free from her supposed asthma.

Correspondence.

Some Common-Place Notes—What Summer Resort?—Pearline for Instrument-Cleaning—Water-Crackers for the Sick—Fusel-Oil in Whiskey—Carnegie's Cholera Investigation—Acid Phosphates in Cholera.

Messrs. Editors,—I was in at Dr. Howe's the other morning, when the boy ushered in a lady, who I afterwards learned was one of Fifth Avenue's best-made mesdames. "Doctor," she said, "will you advise me where to go to spend the summer?" "No, I shall not advise you anything of the kind," the Doctor answered. "Why?" "No use in asking me. I do not know. "Why, you are our physician, and know my constitution." "Yes, but I cannot advise you." "Why?" "For several reasons. I shall not advertise any place to you; I am not a climatologist; I do not always please those who ask such advice. Where were you last year?" "At Saratoga Springs." "Did it agree with you?" "No." "Where were you the previous summer?" In Vermont and Canada." "Did it agree with you there?" "No." "Do you know of any place where you receive benefit?" "Yes, Doctor; I think Newport." "Go there, then. You came to me with a foolish question, and one that you are certainly old enough to answer yourself. You know where you are benefited better than any one else can, and you must be your own adviser. A physician should never be betrayed into advice of this kind."

"Cleanliness is not any nearer of kin to godliness than second cousin," my old preceptor used to say; and as an illustration he would put inspiration into his emetics by stirring them with his nev r over-clean fore finger. But a first-rate old proverb is always worth pinning faith upon, and when I first began practice I adopted this saw into my ar-

mamentarium. I had a great love for bright steel, or silver, or nickel, and was resolved on having my instruments in good trim. I had bought the best, and though there were plenty of instrument makers with instruments old and new to be had cheap enough, my practice did not warrant frequent new purchases. So there were weekly polishings with the chamois skin and anointings with sweet oil, and as a result things looked as bright as new, or as if they had never been used. But after a while there was less time to attend to my cabinet, and the ill of oxidization began to claim possession. I could better afford new now, and really had no time to polish and planish. It was recklessness, but a physician in busy practice cannot be fussing. One day, however, the matter made me ashamed. The bistoury that I took from my case to lance a little girl's cheek was far from bright, and I remarked, "It looks rusty, but that is because it is used so much." "Doctor," said my patient, "we use our knives and forks, but they are always bright." That day at dinner I said to Biddy, "How do you manage cutlery?" "I use pearline, sir," alluding to a laundry article that every housewife knows. I got some, and from that day I have kept my armamentarium in order by its use, using it as the servant does for cutlery,—a little in tepid water for washing the surfaces, followed by a minute or two of brisk rubbing with a cloth. It occupies but little time, and is the best way to keep a lustre that I know of. There is something to be learned of our dining-room girls if we are looking for it, or of those who know nothing about our needs. But, then, there is no need of telling that a physician uses a laundry article in his office.

I want to get in a word about crackers. The convalescent is invariably advised to try a little cracker-and-butter, cracker-and-milk, cracker-and-bouillon, cracker-toast, or something of the kind. As often as not your patient tells you that it disagrees with him, and you cannot see any reason why it is so. But it is so. A cracker is not always a cracker. There are those that will not digest without difficulty, and are about as proper for a convalescent to eat as a biscuit. But water-crackers are what we ought to advise,

or at least that is what I find I can specify. Milk-crackers or soda-crackers, or any kind except these good old-fashioned *water-crackers*, are no more fit to eat than pastry. When we put a patient on wheaten food, we should begin on something as simple as gruel, and look out for that which the gastric juice does not want to touch.

It would be a grand thing for medicine if we could get rid of fusel-oil in our alcoholic liquors. In nine cases out of ten it is this amylic excess that we have to guard against when giving whiskey. Amylism is the bane of our profession. I prefer ethylism every time. Why cannot distillers stop their cupidity, and give us pure whiskey?

Andrew Carnegie is sound in founding his cholera investigations at Bellevue. Everything is sweet there, whereas there is an acidulated condition of things at the New York Hospital. Koch, you know, would have us beware of acid in plate-culture. This is one of the worth-whiles too. I am told that in Italy they are using acid-phosphates in their cholera treatment, and I propose to try it on here if the occasion comes. Theoretically, it would work well; but then there is no use of going beyond prophylaxis till the cholera comes.

A Looker-On in New York.

Proceedings of Societies, Boards, etc.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, July 6th, 1885.

The Vice-President C. W. Purdy, M. D., in the chair.

Dr. Robert Tilley exhibited microscopical specimens of the fungus, *aspergillus glaucus*, taken from the human ear, an *osteoma developed from the crusta petrosa of a canine tooth*, and filaments, or *mycelia, from the body of a tonsil.*

Aspergillus Glaucus from Human Ear.

Dr. Tilley, in describing the three specimens exhibited under the microscope, referred in the first place to the fungus—aspergillus glaucus—taken from the human ear. He has had the specimen for about three years but did not deem it of sufficient interest to exhibit it before. It is however

an object which many have not seen before, although it is mentioned in every text-book on the subject. His experience relative to the question of the aspergilli in general relative to their influence when found in the ear leads him to to think that thier influence as a source of pain in the external ear is greatly exaggerated in the books. This specimen was taken from the posterior wall of the meatus of a little girl who had for some time previously been afflicted with otorrhœa. The otorrhœa had however ceased and the fungi were readily recognized in lusty growth immediately on looking into the ear. There was however no pain complained of; the patient was brought rather for inspection than for expectation of relief. You will observe that the fungi are growing on what by simple inspection might be called dried but otherwise normal wax. You will notice that the fungus consists of one straight long stem surmounted by a round ball, very much like the top of an onion which has run to seed. It is commonly said, rather on theory than on observation, that they are caused by sleeping in low, damp apartments. The child from whom this was taken belonged to people in good circumstances and was well taken care of and was not living in damp quarters.

Osteoma from Crusta Petrosa of Canine Tooth.

The next specimen is the osteoma developed from the cementum or crusta petrosa of a canine tooth. I should give a word of explanation as to how it came into my hands: A friend was speaking to me of some one who had been subjected to the operation of drilling through the fangs of six teeth on account of what was called "ossification of the nerve." In speaking to one of my acquaintances among the dentists about such a condition, I was presented with a tooth a section of which I exhibit to you. Both macroscopically as well as microscopically, the line of demarcation is well defined; the general appearance of the tumor is that of bone, and it differs greatly from the general appearance of the tooth proper. Moreover, the canal, through which the nerve and vessels enter, is greatly diminished in its course through the tumor; consequently great pressure must have been exerted on the nerve. On looking at the specimen through the microscope, you will see very clearly that while the line of demarcation between the dentine and the proliferation of the crusta petrosa is well marked, and the lacunæ and canaliculæ of the bony structure of the tumor are well demonstrated, there are also a number of con-

torted tubules in the bony tumor which resemble, somewhat, the dental tubules. Haversian canals are of course not present, they never are in such growths. The usual clinical history is one of severe pain, which nothing but extraction seems capable of relieving.

Mycelia from Tonsil.

This specimen was obtained from one of those little pockets which are often found in the tonsils. They seem to come and go, sometimes without giving any more inconvenience than a little discomfort. They are frequently associated with fœtid breath, and in some cases the masses themselves are very offensive in odor. In the present case, however, there was no fœtor. There was, however, an unpleasant sensation amounting to a positive discomfort running down the neck externally, in the direction of the sterno-cleido-mastoid muscle. On pressure around the base, the little mass popped out suddenly, so that it came near going down the patient's throat. In examining it, under the microscope, it proved to be one mass of filaments, very fine, and containing spores in the body of the filaments, and associated with fat crystals. He succeeded in staining them with methyl violet, but only after first extracting the fat with ether. After the removal of the small mass he did not think any treatment was necessary; but as there was a little bridge of tissue more or less dividing the cavity into two sections, he divided the bridge with the electro-cautery.

Treatment of Acute Coryza with Cocaine, and its Action.

Dr. J. A. Robinson said the literature on the subject of the treatment of acute coryza is scanty and of a stereotyped nature. The profession seems to have arrived at two conclusions: First, that it is not a disease of sufficient severity and importance to command especial attention; second, that no plan of abortive or curative treatment has been sufficiently successful to cause them to investigate the subject further. However, in view of the fact that repeated attacks of acute coryza undoubtedly have a causal relation to pathological changes in the nares which it is difficult to remove, and that we are so frequently consulted by public speakers and singers who beseech us to abort or rapidly cure such acute attacks, it certainly deserves more than a passing notice.

The time-honored plan of aborting an acute coryza by the administration of a full dose of opium, an active purge and a potent diaphoretic has proven more disagreeable than efficacious. The plan, advocated by Dr. Ferrier, of blowing

into the anterior nares a powder composed of morphia, bismuth and acacia has been quite satisfactory in a few instances, but it is not free from the objection that, when successful it often produces an unpleasant nausea. Its success is undoubtedly due to the sedative and astringent effect upon the inflamed mucous membrane.

What are the pathological conditions in the first stage of acute coryza? Briefly, there is dilatation of the capillary vessels, the arterioles being dilated and the venules engorged, inducing tumefaction of the mucous membrane. This is accompanied by dryness and pain. Secretion is abolished. In reflecting upon the circumstances the thought naturally arises, whether, if we can employ such measures or drugs as will antagonize these abnormal states, we will succeed in aborting the disease. We have recently had added to our armamentarium a drug which more completely antagonizes in its physiological actions these pathological conditions than any other. It is the hydrochlorate of cocaine.

Its physiological actions have been demonstrated to be, concisely, as follows: When applied to a mucous membrane, it is a potent although transient anæsthetic, a vaso-motor constrictor causing contraction of the arterioles and depletion of the venules, thus rapidly emptying congested tissues of a surplus of blood. This drug is also an astringent and has the property of lessening the secretion of muciparous glands. On studying the relation between the state of nasal mucous membrane in the first stage of acute inflammation and after an application of cocaine, the theory was formulated that cocaine should prove useful in aborting acute coryza, and it was determined to try it on the first opportunity. The details of the first experiment are as follows:

Miss———, a soprano singer in one of our city churches, applied to me on the morning of February, 22nd, and desired immediate relief from a "cold in the head." She complained that the previous night she had been exposed to a draft and awoke that morning with the cold, as evidenced by the fact that she could not breathe through the nose, and that her nose felt dry and painful, and she had lost the sense of smell. Inasmuch as she had to sing that night at a special service, she must have immediate relief. Upon examination I found all the conditions incident to the incipiency of an acute coryza. Her temperature was 102° F. with some acceleration of the pulse.

Febrifuges and a mild diaphoretic were prescribed. A local application of a four per cent. solution of hydrochlo-

rate of cocaine was applied, as thoroughly as possible, to the congested mucous membrane, and the parts were sprayed, also, for some time with a warm alkaline spray, hoping thereby to reduce the hyperæmia. After having made another application of the cocaine, the patient was instructed to return home and follow the same line of treatment and to return the following day. She did not return until three days later, when she reported, to my surprise and gratification, that she had been able to sing as desired, and that no symptoms of the disease had returned.

The success which attended this new departure induced me to try it in other cases of acute coryza which were seen early, and it has almost always been successful. Of course, the number of cases which we see in their forming are few, on account of the fact that the patients do not seek medical advice for this affection until the disease is well advanced.

In the use of cocaine for the purpose of aborting an acute coryza there are some objections: it has to be applied often in order to maintain its action on the inflamed mucous membrane, and it is an expensive drug. I have found that the use of a warm alkaline spray serves to prolong the sedative action of the cocaine. Of course dependence is not to be placed on local measures alone, but in addition proper attention is to be given to constitutional and hygienic treatment.

Dr. Tilley said he had used the hydrochlorate of cocaine in two or three cases of acute coryza with much satisfaction. According to one patient, an attack had ended with a single application. While he did not look upon cocaine as a sure cure for acute coryza, he thought it almost always did good. He referred to a serious accident which occurred to one of his patients during the use of cocaine. The patient was a boy aged twelve years, in whose nose a little cocaine had been used. After the first application he suffered a little nausea, which was not regarded as serious; after the second application, the nausea was worse, but it was not until a third application had been made that the symptoms became alarming. These symptoms were difficulty of breathing, syncope, irregular action of the heart, cold perspiration and loss of sensation in the extremities. Notwithstanding these symptoms were alarming, the boy recovered quite rapidly. He had noticed reports of cases in the journals where the same symptoms had appeared.

Dr. Weller said that he had had a good deal of experience in the use of coca, especially in the form of the fluid extract. He had taken large doses; in his own case he had used two

pounds in a short time. Formerly he had considered it as harmless as tea, but latterly he had arrived at the conclusion that it is a powerful narcotic. The strange phenomena which follows the use of cocaine in some cases, he believes to be due to the narcotic action of the drug, and that they would not appear if the drug was not given in large doses. He believed some patients to be peculiarly susceptible to the action of coca or cocaine, similar to the idiosyncrasies of patients in the use of belladonna, opium and alcohol. In the case mentioned, he believed the symptoms to have been the result of an overdose of cocaine. In his experience, he had found a two per cent. solution of cocaine strong enough, and urged the tentative use of the drug in the same manner as in the use of morphia.

Dr. Webster did not wish to be considered skeptical, but he had some doubt as to the alarming symptoms in the cases mentioned having been due to the drug. Is it not possible they were the result of reflex processes in over-sensitive patients? He had a patient recently who vomited after holding a fever thermometer under her tongue.

Dr. Paoli believed that the old treatment of acute coryza by giving the patient a hot bath, muriate of ammonia internally, and inhalations of camphor in hot water, or the oil of eucalyptus, combined with borax, to be the best, although he would acknowledge that cocaine would often relieve severe attacks in a short time.

Dr. S. J. Jones asked the author of the paper if he had used cocaine with a steam atomizer in acute pharyngitis, tonsilitis and laryngitis; also, if the applications of cocaine to different patients were from the same solutions and at brief intervals, so as to be able to state how a reliable solution acted on different patients.

Dr. Robinson, said he did not advocate the plan of treatment as infallible or free from objections, nor did he neglect to use other means of cure if he thought they were advisable. As to the effect of cocaine on certain patients, he had a similar experience to Dr. Tilley in the case of a woman who had twice been operated on without cocaine for nasal polyps. No unfavorable symptoms occurred during these operations. At the third and fourth operations, cocaine was used and the patient was troubled with nausea, vomiting, palpitation of the heart and syncope. As no cocaine had been used in the first two operations, these symptoms in the third and fourth operations seemed to be undoubtedly due to an idiosyncrasy of the patient. He had not used cocaine

with the steam atomizer, but he thought it feasible, if the drug were not so expensive. He prepares fresh solutions for each patient so as to preclude all possibility of failure of action by reason of deterioration of the solution by age. He had found the same package of cocaine to vary in its local and constitutional effect on different patients, affecting some more rapidly and profoundly than others.

Analyses, Selections, &c.

Remarks on Laparotomy.

Dr. James B. Hunter, Surgeon to the Woman's Hospital, New York, N. Y., reports fifty cases of abdominal section, performed by himself, in the *New York Medical Journal*, April 4th, 1885, which we regret not having had space to note before. Besides these fifty cases, Dr. Hunter bases his opinions on some 650 operations by others, in which he has assisted, or else which he has witnessed. Our space does not allow of a reprint of the cases he details, but we add to his prefatory remarks a few of his notes of suggestion that arose while operating, or since.

It is well, he says, to make a rule in all cases of abdominal disease, to submit the patient to a thorough examination as to diseases of the other organs before deciding upon any operation. It is especially important that the urine should be carefully examined more than once, and the condition of the heart and lungs investigated.

Incision.—It is always best, except in cases of large solid tumors, to begin with a small incision. An incision three inches in length is quite sufficient for diagnostic purposes, and for the removal of many large cystic tumors, it is easy to enlarge the incision; and in case that is not necessary there is greater certainty of obtaining good union of the abdominal walls.

Spray and Antiseptics.—I consider the use of the carbolized spray invaluable in the operating-room. It should be very fine, and allowed to fill the room for at least an hour before the operation, the apparatus being placed high. During the operation it should be directed away from the patient, and on no account be allowed to play directly upon the exposed abdominal viscera. Coarse spray thus directed will rapidly cool the surfaces that should be kept warm, and

thus, if not by the poisonous effect of the carbolic acid, add greatly to the danger of the shock. The spray is especially valuable when spectators are present, as constituting a sort of veil between them and the patient. The water used for the spray, as well as that used for sponges, instruments, irrigation, etc., in all abdominal operations, should be water that has been heated above the boiling point. A microscopic examination of the sediment of the water ordinarily used for washing purposes will demonstrate the necessity for this precaution. The use of a small quantity of some antiseptic, while a large quantity of impure water is allowed, is a good instance of straining at a gnat and swallowing a camel. The ideal antiseptic environment is very hard to obtain. It requires perpetual vigilance, even in the best regulated hospitals, to secure satisfactory antiseptic conditions; and in private practice, with strange or indifferent nurses, it is next to impossible, even where expense is not regarded. In fact, the proper use of antiseptics is much more a matter of faith than of expense, and without the cordial co-operation of all concerned, there will pretty surely be some vulnerable points. These may often be covered by the judicious use of the spray, which with certain precautions cannot possibly do any harm. I now believe carbolic acid fully as efficient an antiseptic as the bichloride, while it is free from the dangers and inconveniences attending the use of the latter. The bichloride cannot be used for the instruments, and the use of two solutions is a source of perplexity to assistants and nurses. The result is often that neither one is employed thoroughly.

Illumination.—The small portable electric light now to be obtained will be found of great practical utility in searching for deep-seated bleeding-points during a difficult operation.

Drainage-Tubes.—There is room for the exercise of much judgment in the use of drainage-tubes. If there is danger of hæmorrhage, a small straight glass tube left in the lower angle of the wound gives a valuable indication of what is going on within. The tube may be examined from time to time with a syringe, or with a little absorbent cotton on a probe. If there is no bleeding, the tube may be removed within a few hours, and the wound closed. If there is evidence of oozing, the tube affords a means of removing the blood or serum. A little blood is often disposed of by the peritoneum without difficulty, but sometimes a very small quantity is sufficient to give rise to septicæmia. The danger of leaving a small tube in the wound, provided it is lightly

closed and well covered with an antiseptic dressing, is very slight. Where there have been extensive adhesions separated, or where any portion of a cyst remains, or where there is a very large pedicle, the use of a drainage-tube is advisable. The best tubes are those made of glass, of small calibre, perfectly straight, and having no openings at the side. In adjusting these tubes into the wound, all the sutures that will be necessary for the final closing of the wound should be passed while the patient is under ether, and the ends left long, so that on the removal of the tube the wound may be closed without pain or disturbance.

Closing the Abdominal Wound.—Sufficient attention has not been given to the very important matter of securing a firm abdominal wall. Sometimes the edges of the wound are not brought together exactly, and therefore fail to unite perfectly. Sometimes an abscess forms in the site of the wound rendering the subsequent union slight and liable to yield to pressure. For over three years past I have made a practice of closing the peritoneum separately, with a continuous catgut suture, using what is known as the "button-hole" stitch. Before closing the peritoneum, one, two or three silver-wire sutures, according to the length of the wound, are passed directly through the abdominal wall, including the peritoneum. These sutures are left loose until the others are introduced. The rest of the sutures are of silk, thoroughly carbolized, and are carried through everything but the peritoneum. When a drainage-tube is used, the peritoneum is closed with catgut up to the tube. Since adopting this method of closing the wound, I have rarely seen abscesses or imperfect union.

Refrigeration.—The use of refrigeration, generally by the rubber coil, in incipient peritonitis, is of inestimable value. Where peritonitis is fully developed, it is still efficient. In cases of septicæmia the abstraction of heat does not necessarily benefit the patient. The temperature may be kept down to the normal point in such cases, and yet they may go on to a fatal termination.

Must We Remove One or Both Ovaries?—It is often a serious question whether the opposite ovary, though not apparently normal, is sufficiently diseased to warrant a removal. If the patient is not beyond the child-bearing age, the opposite ovary and tube should be very carefully examined, and removed only if there is evidence of disease. In many cases of ovarian tumor the opposite ovary has an apparent tendency to cystic disease. It is a misfortune to remove a

healthy ovary, and it is equally a misfortune to allow one that is diseased to remain, and thus place the woman in peril of a second operation.

Ovarian Fluid Non-Irritating to Peritoneum.—Case VIII illustrates the fact that the fluid contained in an ovarian cyst is not necessarily irritating to the peritoneum. When this case was reported to the Obstetrical Society, several others were cited in which the peritoneum had tolerated the presence of ovarian fluid. I have several times seen the abdominal cavity bathed in fluid from ovarian cysts ruptured during operations, without any bad consequences afterward.

I have been very careful to *make as little traction as possible* in raising the ovary for the purpose of securing the pedicle, and to avoid the use of a ligature twisted too tightly, as I have on several occasions known hæmorrhage to occur below the ligature, though the ligature had been perfectly secure.

For the *discovery of bleeding points* from torn adhesions deep in the pelvic cavity, I have found a large cylindrical speculum somewhat useful. Bleeding points which cannot be tied may be touched with Paquelin's cautery. Firm pressure made by a sponge nearly dry will sometimes suffice to check oozing.

Size of Some Tumors Prevents Vaginal Operation.—Case XXVI illustrates this point. It would have been next to impossible, even had the exact condition of the uterus been known, to remove so large a tumor by means of the vagina. The woman was unmarried, and the vagina and cervix were very small. The difficulty and danger of forcible dilatation, and the removal of the mass piece-meal, would have been very great.

Treatment of Scarlet Fever.

Dr. T. Griswold Comstock, of St. Louis, has a paper on this subject in the March number, 1885, of the *New York Medical Times*, which contains suggestions worth remembering. He first remarks that mild cases of scarlet fever require scarcely any medicinal treatment, the disease being in fact self-limiting. Keep the patient in a well-ventilated apartment, at about 65 or 68°, with a rigid diet, such as milk or gruels, tea, cocoa, broths, and lemonade *ad libitum*. After appearance of the rash, anoint the patient with [cosmoline or] vaseline, and where the eruption is intensely developed, carbolated [cosmoline or] vaseline may be substituted. Usually desquamation sets in as soon as the eruption begins to decline, on the sixth or seventh day.

The serious complications and sequelæ we may attribute to the paralyzing effect of the virus, which, by poisoning the blood, finally effects the brain and nerve-centres so that fatal embolism of the heart may ensue. Such complications are often made manifest by aggravation of the fever, as high as 106° or more, when we may also anticipate the setting-in of other unfavorable symptoms, such as enlargement of the glands of the neck, pharyngitis, metastatic inflammation of the ear, and albuminous nephritis.

The general indications for treatment are, to reduce temperature and moderate fever, sustain strength by proper nutrition, promote repair of tissues and organs seriously implicated and injured by the disease, and prevent complications. *We cannot abort an attack of scarlet fever*, and no medicine has the property of destroying the specific virus of the disease. Belladonna, recommended more than eighty years ago by Hahnemann and Hufeland, has been credited by not a few as being a reliable prophylactic. But after a large experience in its use as a *preventive*, the final results are negative, and it is not considered trust-worthy, yet belladonna is curative for many symptoms that occur during the course of disease.

During this fever, we are liable to have set up a number of *necrotic* processes; the objective point of all in this disease is a peculiar virus acting prejudicially upon the system. The effects of this poison are in some instances so energetic and lethal, as to cause convulsions or coma, ending fatally in a few hours; sometimes before the practitioner can make a clear diagnosis, we have rapid and sudden uræmic intoxication of the brain, which affect the nerve-centres so energetically as to end in death. Unfortunately, convulsions may set in at any period, even during convalescence, when they may in some instances exhibit phenomena similar to tetanic spasms. These spasms are peculiarly liable when there are any developments of rheumatism during the convalescence; and when rheumatic symptoms develop insidiously, even during the decline of the disease, they are among the most serious complications that can happen.

For three years past, I have prescribed stimulants freely for all *serious* forms of scarlatina. I administer them in the form of wine-whey, milk-punch, or *pure whiskey*, in doses of two teaspoonfuls of the latter every two hours, given in a little water. If collapse threatens, give it more frequently. This treatment surprises some old conservative practitioners. I

have had no occasion to regret the trial, as no case so treated has terminated unfavorably.

In support of this treatment, I will refer to the following authorities: Dr. E. Henoch, in his *Diseases of Children*, says that he has discarded quinine, salicylic acid, etc., and confines himself to alcoholic stimulants. Tokay wine, champagne or brandy he recommends, in two-spoonfuls doses, every hour in bad cases. Dr. J. Lewis Smith, *Diseases of Children* (fifth edition, page 209), says: "*While all but the mildest cases* require the use, at regular intervals, of alcohol, either in the form of wine-whey or milk-punch, *those severe cases* which are designated *malignant* require alcoholic stimulants *in large* and *more frequent doses.*" Dr. G. S. Mitchell, *Cincinnati Lancet and Clinic* (Vol. X, page 53), before the Cincinnati Academy of Medicine, stated that he had treated over forty cases of scarlet fever, and had given whiskey freely, and all recovered.

In severe cases, the child's system is intensely intoxicated by the virus of the disease itself, and this poisoning enables the patient to tolerate alcohol in increased doses. That alcohol is a "food" I have never quite believed; it is conceded to be an "*indirect nutrient.*" But it prevents rapid molecular changes, retards elimination of waste matter, checks metamorphosis of tissue, lessens nerve-sensibility, lowers the bodily temperature and is rapidly oxidized in the system. Alcohol, given in such a zymotic disease by stimulating the nervous system, saves the tissues and enables the capillaries to contract and be emptied of their blood, thereby calming vascular excitement and inflammation, and in this way probably reduces the temperature, so that in this especial disease it may act as an antipyretic.

Moleschott, in this quaint language, said: "Alcohol is the savings bank of the tissues;" its benign and curative action in scarlet fever proves the truth of the aphorism. Again, probably alcohol acts by lessening the oxidizing tendencies of the red corpuscles of the blood, diminishes sensibility of the brain and nervous system, and thereby renders the poison of scarlet fever less intense and energetic, so that it cannot act deleteriously as it does when no alcohol is taken. Lastly, it is proved that "while alcohol is circulating in the blood its presence retards those molecular or atomic changes which constitute nutrition, disintegration and secretion, on which the phenomena of life depend."—(N. S. Davis, M. D., *Lectures on the Practice of Medicine.*)

As long ago as 1848 it was asserted by Dumriel and Du-

marquay that after administration of alcohol there is a fall in the temperature of the human body, and that it causes sweating and is thus eliminated through the skin. The influence of alcohol is therefore favorable against the inroads and severe consequences of the infection and especially against *necrotic* processes, *e. g.*, diphtheria, adenitis, etc.

When the paralyzing influences of the poison develop—the pulse mounting up to 135°, or even 160° a minute, the temperature at 106° and more—then we may with safety administer whiskey. I have not had occasion to try this treatment upon a child under three years of age, but would not hesitate to do so if such a case should occur.

Tepid and Cold Water.—Throughout the whole course of the disease, when the child is restless, bathing freely with tepid water will act as a sedative but is only indicated when the temperature is not excessive, at about 103°. When the temperature is 105° or more, we order the child to be bathed with iced water, applying it with a sponge or cloths. This refrigerating treatment may be kept up for hours, or even days, as we did a few months since, in a male child four years old. In this case, after the fourth day, when the symptoms became more and more unfavorable, with temperature of 106.1° apparently rising, and the child not having slept since the onset of the attack, we placed him in a wet sheet (69°) and kept him in it about three-quarters of an hour. When he was packed he was in a state of the greatest nervousness and exhaustion from want of sleep, and the excitement was great. His elbows, knees, shoulders, and almost the whole periphery of his body, were intensely reddened from constant friction caused by the restlessness, tossing and turning in bed, that had been kept up, without intermission, for four days previously. While placing him in the wet pack he at first resisted very much, but within ten minutes after it was first applied, he became quiet, and soon was apparently asleep. After taking him out and placing him in bed he was much more quiet; his temperature had fallen to 104°; he began to rest some and passed a fair night. The refrigerating treatment was, in a measure, kept up for three days, but the favorable crisis took place immediately after he was placed in the first wet sheet. Such favorable and encouraging effects from the refrigerating treatment are by no means rare. In vigorous and strong children, and in sthenic cases there is no danger of collapse or other unpleasant consequences from the cold so suddenly applied. Immediately before the pack, or applying cold affusions some stimulant is to be

given, either Tokay wine or whiskey, to prevent anything like a collapse. The use of cold water or refrigeration, is especially applicable for cases not only similar to the one cited, but those forms of scarlatina that do not run a normal course, where the rash fails to appear, skin is pale, extremities cold, pulse weak, temperature very high, and not in conformity with the other symptoms.

In "scarlatina fulminans," the attack is ushered in suddenly by a convulsion, the skin shows no appearance of the rash, coma follows the convulsion. This form usually ends fatally. In a case under the care of another practitioner, the temperature rose to 105½°, when the wet sheet was applied and the convulsion was allayed, the temperature moderated, the eruption appeared, and the child recovered. The cold water in such cases acts by the sudden revulsion it produces in at once cooling the patient so that it soon acts as a sedative, I have had at least three cases where the eruption, which was already developing, suddenly retroceded, and the fever began to increase in intensity. I saw fit to try the cold water pack, and the effect was to bring back the suppressed eruption. The temperature of the water should be about 69 to 70 degrees, and to satisfy the friends who are prejudiced against cold water, pour some whiskey in it.

For several years past we have carefully examined the urine of all scarlet fever patients that we have treated, and have found albumen (sometimes only a trace), in about half of the cases. In earlier years of practice, we were taught to regard the presence of albumen in scarlet fever as a matter of grave importance; such, however, is not always the case unless it is exhibited in excess.

Scarlatina may appear and run its course without any eruption. How mild soever, the primary disease may, by contagion, give rise to other cases of the gravest severity, and the gravest sequelæ ensue. When, after the 5th or 6th day, the glands of the neck swell and become indurated (scarlatinal bubo), it is an indication of the development of a *necrotic* process peculiar to this disease, and it may be regarded as a serious complication. The treatment of this swelling (in addition to the internal remedies usually prescribed for it) cannot be limited to the "bacon rind," so popular in domestic practice, and certainly useful; but a poultice of aconite leaves will be a very soothing application. Ice, pounded and enclosed in a cloth, has been recommended to relieve or to reduce these swellings, and sometimes it acts well; but we can recommend something better in aconite.

Of late we have tried the following poultice, suggested by Dr. N. S. Davis, of Chicago: Take of aconite leaves, one ounce; muriate of ammonia, half an ounce; pour upon these two pints of boiling water, and make an infusion. These leaves taken out of the hot water are to be placed in a thin muslin cloth and may be applied as hot as can be borne, and frequently changed, so that it will be continuously hot.

Diet and Nourishment.—Only liquid food is allowed until convalescence is fully established and completed. This rule is absolute in all cases. The following articles are especially recommended: milk, barley, gruel, beef tea, oyster broth, cocoa, or broma, Japan tea, soda crackers toasted, milk-whey, wine-whey, and milk-punch in severe cases; in convalescence, buttermilk, custard, tapioca or farina pudding, may be given with propriety. In some cases ice cream may be allowed, and it is frequently very grateful to the patient; also lemonade may be taken at any time desired. When the child is thirsty, give freely of pure water, but if nausea is complained of, then give carbonic acid water out of a syphon bottle; this last named should be always at hand, and will be very refreshing throughout the attack. It is believed by some to materially allay the sore throat, the nausea, and quenches thirst. When convalescence commences the child should be kept in a room at about 70 degrees. The room should be ventilated daily, but all draughts must be carefully avoided. *There is much more danger from "catching cold" during convalescence than while the fever is at its height.*

In not a few cases convalescence is incomplete; the child remains weak, with loss of appetite. Some insidious complications may cause no little alarm. In such cases we suggest a little black coffee for its tonic effect. At this period a secondary fever may set in or threaten, and a few doses of quinine may be required to properly combat this condition. The clothing of the child and the bed covering should be changed at least every other day; perfect quiet should reign in the sick-room, and no *company* is to be allowed to come to the house.

A curious fact about the contagion of scarlet fever, as stated in Dr. J. Lewis Smith's work on *Diseases of Children*, is that it is possible for a child convalescing from scarlet fever, that has otorrhœa, to give the disease to another child, and a case is cited to that effect.

Some children are brought very low after an attack of scarlatina, and do not properly convalesce—they are even reduced to a state approaching marasmus. Here koumiss

is to be recommended—indeed, this may be given at any time during the run of the fever, for nourishment, if the child relishes it. Koumiss is really a "milk wine," or, as some call it, a "milk champagne," and it is peculiarly adapted for children or adults when afflicted or threatened with any debilitating or anæmic conditions of the system.

One more practical resort is the sponging of the child with equal parts of vinegar and water, highly praised by German authorities, not only for its sedative, soothing and cooling action, but it is claimed that it will in a degree modify the poison; that is to say, that vinegar possessing certain disinfecting properties, will exert some action in assisting nature to eliminate the poison. Lemon juice, when freely taken through the whole course of the fever, exerts a favorable influence of this kind.

NOTE.—Since the appearance of the above, the writer has treated one very severe case of scarlet fever, after the foregoing suggestions. It was a well developed, unusually plethoric and precocious girl ten years old, attacked with the disease in its severest form. The eruption came out well, but the child was comatose and delirious after the first day, with a temperature of 105° and more. The treatment was by giving such remedies from time to time as would allay the fever (aconite, belladonna, etc.), but in addition, a dessertspoonful of whiskey in a little water, or whiskey in milk punch was given every two or three hours for some six days, until the child was better, and without delirium. The child was, for several days, bathed almost continuously with cold water, iced a little. The case terminated favorably, and convalesced well, with no complication, except a "scarlatina bubo," swelling of the parotid gland, involving the adjoining cellular tissue. This swelling terminated in suppuration, and was freely opened, and complete convalescence was the result.

Dr. Samuel Jones Gee, of London, (in Reynolds' System of Medicine, Vol. I., p. 96), says: "In *adynamic cases, a liberal allowance of wine will enable such patients to recover*"; Aitkin's Science and Practice of Medicine, Vol. I., p. 324, in speaking of the severe forms of scarlatina, says: "The administration of wine (and nourishment) should be the *basis* of treatment, and the earlier the wine is given in the disease the better; and, *when delirium does or does not exist, regardless, also, as to whether the tongue is moist and white, brown or dry, it should be continued until the patient is decidedly convalescent!*" Dr. Aitkin adds that in the still severer cases, "brandy may be required."

Hay Fever—Its Causes and Cure.

This is the title of a highly interesting and instructive article of fourteen pages by Prof. E. Fletcher Ingals, of Chicago, Ill., in July No., 1885, of the *Chicago Medical Journal and Examiner*. Bostock discovered the disease in 1819. It is now known by such other names as hay asthma, rose-cold, June cold, idiosyncratic coryza, autumnal catarrh, etc. It is common in southern England, but rare in other parts of Europe. In Asia and Africa, Europeans only are said to be affected by it. It is very common in the United States. Although popularly believed to be caused by the pollen of certain grains, it occurs less frequently among farmers than in those living in villages, and its greatest number of sufferers are residents of cities. It seldom attacks any but those in comparatively easy circumstances, and hence may be called an aristocratic affection. In England, it is most prevalent during June and July; but in America, it usually begins about August 15th, and continues till frost. Some cases, however, occur in spring, and isolated cases begin during winter; hence the term "idiosyncratic catarrh."

During an attack, the mucous membrane covering the turbinated bones is greatly swollen and generally congested—the congestion often extending to the palate, fauces, pharynx and conjunctivæ. Numerous vibriones are found in the nasal secretions under the microscope, which many thought to be the cause of the disease, but now these are believed to be merely accidental. Various substances floating in the atmosphere, such as pollen of the grammaceæ, of the ambrosia artemisiæfolia (rag weed and honey weed), etc., act as irritants upon the respiratory mucous membrane of those predisposed to the disease, and give rise to the train of symptoms of hay fever. The pollen of rye, wheat, oats, corn, hay, clover, etc., act in the same way in some persons; and with other parties, even dust, emanations from various drugs, animals, etc., seem to act as sufficient irritating causes of the affection. Some, indeed, are so susceptible that simply passing from a warm room to a cold room, or the reverse, or passing from the shade to the sunlight during certain seasons of the year especially will excite spells of sneezing.

These attacks of autumnal catarrh have recently been shown to be due to the condition of the nervous system rather than to any special quality in the exciting agent. An exhausted nervous system becomes irritable, and these agencies—otherwise innocuous—will in one excite neuralgia; in

another, catarrh, etc.—the peculiar manifestation being determined by the susceptibility of certain nerves. Since 1882, the combined studies of Daly, Roe, Sujous, Hack, Allen, Mackenzie (of Baltimore) and others, have localized the sensitive tract for the majority of cases of hay asthma on the inferior turbinated bodies and the lower and back part of the septum. In a few, much more of the nasal mucous membrane is involved, and in rare instances the sensitive tract extends to the fauces and, possibly, to the bronchial mucous membrane. In some cases, the middle turbinated body, and the anterior portions of the septum, and lower turbinated bodies are also involved. The sensitive points may be in either one or both nares. The principal changes, therefore, are located in the branches of the spheno-palatine ganglion and nasal nerves, yet the nature of these changes is not yet discovered, but seem to be analagous to the condition in neuralgia and hyperæsthesia. The causative irritants also affect the vaso-motor nerves, as shown by the sudden swelling of the erectile tissues in the nares.

The *primary effect* of the irritation is to cause profuse secretion from the nares with swelling of the mucous membrane, which more or less occludes the nares and necessitates mouth-breathing, with consequent irritation of the throat. The asthmatic symptoms are more probably the reflex result of the nasal obstruction and irritation. After a while, acute inflammation of the Schneiderian mucous membrane occurs, which may extend to the mucous membrane of the eyes, ears, throat and bronchi.

Hence the first *symptoms* are like those of a cold in the head, attended by frequent sneezing and burning pain, with profuse secretion from nose and eyes, which soon become red, swollen and tender; temperature is usually slightly elevated; suffering is sometimes extreme; nasal respiration is soon interfered with, and often asthmatic attacks add to the discomfort. The first symptoms are rarely referable to the naso-pharynx and fauces. During the height of the attack, the discharges frequently cause erosion of the nostrils and upper lip. Numerous bronchial rales are discovered in the lungs. These symptoms usually last from two to six weeks. Some cases last until the first sharp frost.

The principal points of *diagnosis* from an ordinary cold are, the periodicity of hay fever, its sudden accession, the sensitiveness and swelling of the nasal mucous membrane, the asthmatic symptoms and obstinacy of attack, as compared

with ordinary cold or spasmodic asthma. The disease, once developed, is to be expected to recur for many years, though with some tendency to its gradual disappearance.

As to *treatment*, to ward off or to lessen the severity of an attack, quinine, strychnia, arsenic and iron may be used internally as tonics, while valerian, assafœtida and phosphide of zinc are useful as anti-spasmodics.

Locally, weak solutions of quinine, carbolic acid or tincture of opium have sometimes given benefit in the inception of an attack. Sedative powders of morphia, bismuth, iodoform, starch, etc., have occasionally given relief, while in other instances they have aggravated the trouble.

For the asthmatic symptoms, inhalations of the fumes of nitre-paper, stramonium, hyoscyamus, etc., and the internal use of morphia, chloral, etc., do good, but are much less useful than in the simple asthmatic affection. But medicinal treatment of hay asthma has heretofore been unsatisfactory. Hence all patients who can resort to climatic treatment.

Soon after the discovery of the anæsthetic properties of cocaine, laryngologists noticed that this drug caused speedy contraction of the swollen nasal membrane, when applied in solution or powder. It has been used with great success to relieve the annoyance caused by swelling of the turbinated bodies in rhinitis, and Dr. Ingals thinks it will be of value in the treatment of hay fever. In one case occurring last winter, presenting symptoms like those of hay-fever, a two per cent. cocaine mixture with starch was blown into the nose as soon as the paroxysm came on, with immediate and perfect relief, although it did not at once cure the attack, which lasted several days. It was sometimes necessary to repeat the application three or four times during the night, but the symptoms were relieved each time within half a minute. A repetition of the attack a couple of weeks later was as promptly relieved by the same treatment. This is the only case the doctor knows of which has been treated by this remedy. Dr. Ingals concludes that although cocaine has a wonderful palliative power, we cannot expect it to cure the disease.

Drs. Roe, Allen and Sajous report successful treatment last year by the galvano-cautery in about 80 per cent. of cases; but most of the patients have not gone through a hay-fever season since their treatment. More time is needed to speak definitely of the results.

But treatment to be permanently effective must remedy the hyperæsthetic condition of the terminal branches of the

speno-palatine ganglion and nasal nerve distributed over the septum and turbinated bones. The means consist in applications of glacial acetic acid, carbolic acid and other escharotics, and searing the membrane with the galvano-cautery. Mucous polypi must be removed; hypertrophy of the turbinated bones must be corrected, if that exists, or the spur of a deflected and thickened septum must be sawed off. Treatment by chemical agents sometimes fail, but from ten to twenty "sittings" with the galvano-cautery, properly used, will remove the excessive sensibility, and leave the membrane in a healthy condition. The treatment should be begun *early* in the season, before the attack comes on, and the "sittings" should be at intervals of three or four days. Sear slightly with the galvano-cautery every portion of the peculiarly sensitive membrane—using a small electrode over a small space only at each sitting. First locate the sensitive spots with a slender flat nasal probe. Then pass the cold electrode into the naris to the sensitive spot, and then turn on the electricity, whereby the wire is instantly heated, and is applied only for a fraction of a second, causing a small, superficial burn. Repeat this operation at subsequent sittings until each sensitive spot is relieved—care being taken not to burn too much lest it cause an uncomfortable inflammation. The pain of this operation is slight in most cases; but cocaine enables us to treat such cases without any pain. A four per cent. solution of cocaine is dropped upon the diseased surface from a small syringe at regular intervals of about two minutes; in from ten to twenty minutes the parts are anæsthetized. In one of his cases, it required over an hour's time and about five grains of cocaine. When no anæsthetic has been used, after cauterization, a spray of Dobell's solution [which, according to Bosworth, consists of—℞. Carbolic acid, gr. j; borax, bicarbonate of soda, $\overline{aa}$ gr. ij; glycerin, ʒj; water, q. s., ʒj. Mix.] should be used to relieve smarting. Between the "sittings," keep the nares clean by insufflations or sprays of "Listerine," which is highly useful for its antiseptic properties.

The doctor announces the following conclusions as to treatment:

1. Nearly all cases may be cured by systematic, thorough, superficial cauterization of the hypersensitive portions of the nasal mucous membrane, provided the treatment is carried out during the intervals between the attacks.

2. The most effective and least painful means of accomplishing this is by the galvano-cautery.

3. Care must be exercised to treat every sensitive spot, and not to cauterize too large a surface at once.

4. The operation may be made painless by a proper use of hydrochlorate of cocaine.

5. In nervous subjects general treatment should not be neglected.

6. The effects of cocaine in hypertrophic catarrh, and in the case of idiosyncratic coryza just reported, render it highly probable that it will give much relief in many cases of hay-fever.

Dangerous Hemorrhage from Rupture of the Vagina during Coitus.

Dr. Paul F. Mundé, of New York, (*Boston Medical and Surgical Journal*) reports two cases of this kind which have come under his observation. In the first case the rent was intra-vaginal, extending inward from the nick in the hymen to the left of and paralled with the urethra. The patient was in collapse, with occasional momentary loss of consciousness. The hemorrhage was controlled by tightly tamponing with disks of alum cotton carried down to the vulva.

The second case was a patient twenty-two years of age, who was feeble and weary-looking from the loss of blood. After the bleeding had been discovered, two physicians had attended her, one giving ergot and the other ordering the application of ice to the abdomen, without making an examination. The hemorrhage continuing, Dr. Mundé was sent for, and upon examination found no bleeding spot in the hymen, but the vagina was full of coagula. This being removed, a deep fissure, two-and-a-half inches in length and one-half an inch in depth, was discovered in the left vaginal wall, extending from about an inch above the hymen nearly to the cul-de-sac. The edges were ragged and bruised. A similar tampon to that used in the first case effectually controlled the hemorrhage.

In neither of these cases was there apparently any disproportion of the generative organs, nor had unusual violence been used. The vaginæ were perfectly healthful in appearance, and both patients were young and of good condition.

Dr. Mundé refers to a case cited recently by Dr. Chadwick, in which senile atrophy of the vagina was apparently the predisposing cause, and also to a case of Ziess where the recent confinement of a woman, and the adhesion of the cervix to the lacerated side of the vagina, sufficiently ex-

plained the accident. There was reported a few years ago in a Canadian Journal, a case where a sailor just returned from a nine years' cruise, on having coition with his wife, ruptured the vaginal vault to such an extent that she came near dying.

Dr. Mundé's cases are interesting as showing that this distressing accident may occur without undue violence or any apparent cause, and they also teach us the importance of making an examination in all such cases before attempting treatment, which must consist of the tight tampon, repeated as long as danger of recurrence of hemorrhage exists, or if the rent is external, where a vaginal tampon cannot well control the hemorrhage, suture should be used.—*Md. Med. Jour.* June 27, 1885.

Infant Feeding.

The question often arises: Is it of advantage or not for an infant to be partly nursed and partly bottle-fed? What action has milk upon starch, if any? To test this, Dr. Charles Potts, of Philadelphia, at the request of Dr. J. M. Keating, of Philadelphia, made some tests, the results of which are mentioned in the *Obstetrical Gazette*, July 1885.

The first set of experiments showed that cow's milk gave no increase of sugar after adding starch; and the question arose, does the acidity of cows milk prevent the sugar change? Does the sugar change continue in an acid medium? If future investigation confirms the tests made by Dr. Pott's we may surely assert that the nursing woman may supplement her breast with some well prepared digestible form of food containing a small quantity of starch advantageously, and also that the amylolytic ferment will remain active in the slightly acid stomach of the infant.

Eucalyptus in Typhoid and other Fevers.

Dr. Leighton Kesteven, contributes his observations on this subject to May No., 1885, of *The* (*London*) *Practitioner*.

While treating cases of typhoid fever in the Brisbane General Hospital, the idea occurred to him that the oil of ecalyptus would be efficacious. In the next 18 months he treated 220 cases of the fever with it, with only four deaths, and these four cases would probably have died from other causes than the fever. His dose is now about ten minims every ten hours. It does not agree well with all stomachs when given simply with mucilage; but trouble in this respect can be en-

tirely overcome by first carefully emulsifying the ten drops of oil with mucilage, and then the addition of a half drachm each of aromatic spirits of ammonia, spirits of chloroform and glycerin—the latter entirely removing the rough semi-resinous taste of the oil.

This medicine acts, *first*, by steadily and permanently reducing the force and frequency of the pulse,—indeed acting with marvellous rapidity in some cases; *secondly*, by lowering the temperature, which occurs less rapidly and may be secondary to, and dependent on the lowering of the pulse; *thirdly*, by the beneficial effect on the tongue—almost immediately alleviating the distressing dryness so universal in typhoid fever, and removing the thick brown coating, leaving, relatively, but little fur, frequently cleansing the tongue entirely in a very short while: and, *fourthly*, the skin becomes moist and soft, giving comfort to the patient.

The Doctor also pins great faith to the liberal use of whiskey from the beginning of attack—even as much as 30 ounces in the twenty-four hours. Ordinarily, he feeds on milk thickened with isinglass, beaten up eggs, milk and soda, cocoa, and—where diarrhœa exists—ground rice and milk. In asthenic cases ounce doses of chicken broth (concentrated to ten ounces from a whole fowl) every half hour or longer, the juice of half cooked mutton, or beef tea made in a pot without water strained through a fine muslin should be used. For the abdominal tenderness, apply ice-cold compresses, and allow ice to suck. Apply ice to the shaved head for cephalalgia, and use frequent cold "packs" from head to knees if temperature rises. Change the bed linen night and morning without letting the patient get out of a horizontal position.

The Doctor thinks probably the eucalyptus acts as a germicide. In most cases, the fever is entirely over in ten or twelve days, although he keeps his patients in bed the traditional three weeks.

Experimentally, he has used eucalptus oil in two or three cases of pneumonia, with the most marked benefit.

Diagnosis of Gonorrhea in the Female.

Martineau, at a recent meeting of the Paris Obstertical and Gynecological Society (Canadian Practitioner), stated a most important fact by which specific can be distinguished from simple vaginitis. It depends upon this, that in the specific form of the disease the pulse is always acid, while in the simple it is alkaline. It is very easy, therefore, to decide by a piece

of litmus paper as to whether a woman is or is not suffering from gonorrheal inflammation. This sign will prove of value, too, in determining when rape has been committed, whether the person committing the crime was affected with gonorrhea, for then the vulvitis would be characterized by an acid discharge, while in the simple form of the disease the discharge is alkaline.—*Weekly Med. Rev.* etc., July 25, 1885.

Odors of the Skin and its Appendages.

The following is an abridged extract from a most interesting and instructive "Selection" we find in the July No., 1885, of the *Journal of Cutaneous and Venereal Diseases.*

The perspiration and the various cutaneous secretions impart a peculiar odor to every human being, as well as to each of the inferior species. Many savages, as Indians, negroes, etc., can smell each other at long distances, just as a hound follows up his master by the scent. Individual instances, much more extraordinary, occur in civilized society. Thus Cadet de Gassicourt speaks of a young lady who could distinguish men from women simply by their odors, and who could not endure the smell of her bedclothes after any one else had handled them. In 1864 a Hungarian monk was able to decide in the same way upon the chastity of females. We ourselves know a physician whose nose informs him with unfailing accuracy whenever a patient is menstruating. The odor of the skin is rarely a pleasant one. Alexander the Great exhaled the perfume of violets when he perspired; Malherbe, Cujas and Haller diffused an agreeable odor of musk. In ordinary individuals, the cutaneous odor is sulphurous and somewhat repulsive—especially noticeable in the red-haired and freckled. Dark complexioned persons smell of prussic acid; blonds, much more feebly, of musk. Fat persons are more odorous than lean ones; the former frequently have an oily smell, due to an excessive formation of fatty acids in the sebaceous secretion.

Age exerts a considerable influence. Nursing infants have a peculiar sourish smell, caused by the butyric acid in their milk. Bottle-fed children smell of strong butter, cow's milk being so much richer than woman's in the oily principle. After weaning, a baby's odor becomes less decided, and, it is said, more agreeable. The human male, at the period of puberty, exhales a characteristic odor which, though less pronounced, is similar to that of an animal in heat. This odor, which is one of the leading symptoms of what Bordeu

calls the *seminal fever*, is more strongly marked in those who are continent. It is probably caused by the absorption of the spermatic fluid into the circulation and the elimination of its odorous principles through the skin. It disappears as soon as the reproductive organs become enfeebled. In old age the skin exhales an odor which has been compared to that of *dry leaves*.

The influence of race is quite as indisputable. The inhabitants of southern latitudes do not smell like those of the north. Their cutaneous functions are more actively performed "The human flower," like the products of vegetation, is more highly perfumed in warm climates. This is especially evident in negroes, whose rank, ammoniacal odor, unmitigated by cleanliness, is attributed to a volatile oil set free by their sebacous follicles.

The nervous system has a very decided action upon the cutaneous odor, which quite frequently is heightened or modified by mental excitement, depressing passions, and neurotic disease. Gambrini recorded the case of a young man who, having been crossed in love, became violently jealous, after which his whole body exhaled a fetid, sickening, and very tenacious odor. Dr. Hammond speaks of a hypochondriac whose skin diffused the fragrance of violets; of a hysterical female who smelt of pineapple during her paroxysms, and another who perspired on the left half only of her chest, whence she exhaled an odor like that of the iris; her sweat, when analyzed, was found to contain a butyric ether. In cases of localized perspiration, these curious osphresiological anomalies are not at all uncommon. Schmitt knew a man who labored under a hyperidrosis that affected his hands only, and smelt like sulphur. Orteschi met with a young girl who exhaled a strong odor of vanilla from the commissures of her fingers. Barbier mentions the case of a captain, the upper half of whose body was subject to an offensive perspiration which resisted all treatment, and obliged him to resign his commission. These are examples of disordered innervation.

We now come to facts which are of practical importance. In *lethargy* (seldom witnessed except in hysteric subjects), the perspiration has a cadaverous odor. This odor has aided in the production of some lamentable mistakes.

The smell given forth from the skin in mental disorders is thus described by Févre (Paris, 1876): "The odor of the sweat in *lunatics* is very peculiar. Fetid and penetrating, it resembles the emanations from hands kept constantly closed,

and is allied to those of the yellow deer and of mice. It is met with more especially in subjects of general paralysis and confirmed dementia. It impregnates the garments, bedclothes and furniture of the patient, and even pervades his apartment, and is exceedingly tenacious, *despite the utmost attention to cleanliness.* This odor is so characteristic that Burrows declares *he would not hesitate, even in the absence of other evidence, to pronounce any person insane in whom he might perceive it.*" Another English alienist, Dr. Knight, goes still further, claiming that the absence of this symptom enables him to discover when insanity is feigned.

. The affection to which Hebra has given the name of *bromidrosis* consists in an offensive odor of the skin resulting from an abnormal condition of the *materia pespiratoria*, without any increase in the quantity exhaled. It may be confined to particular portions of the body. *Bromidrosis pedum*, for example, is quite a common disorder. "Le Roi Soleil," Henry of Navarre's neighborhood was almost insufferable to his courtiers, and his very mistress reproached him with smelling "like a carrion."

The *inguino-vulvar* and *inguino-scrotal* perspirations possess an aromatic odor closely akin to that of the genital region in either sex.

The *axillary* sweat owes its peculiar redolence to the alkaline caproates; also, to certain volatile and odoriferous free acids.

Hyperidrosis of the axillæ is especially apt to occur when the body is unclothed, and, in women, during the catamenia, at which period it diffuses an aromatic odor of acids or of chloroform.

Localized sweats, almost always of tropho-neurotic origin, have usually a strong smell. This is probably due to maceration of the epidermis in the effused fluid—epithelial desquamation being also of frequent occurrence in all such nervous conditions. Weir Mitchell has observed that in lesions of the nerves the corresponding cutaneous region exhales an ordor like that of stagnant water. This, we believe, is owing to a disturbance of the epithelial nutrition, rather than to any actual alteration in the sweat.

The *ingesta*, whether nutritive or medicinal, *readily eliminate their odorous principles through the skin*, and thus exert an influence upon the cutaneous odor. Garlic, alcohol, coffee, truffles, valerian, musk, turpentine, tar, sulphur and its alkalies, the fetid gum resins, ethers, angelica, benzoic acid, iodine, and the iodides, phosphorus, etc., transmit to the

integument their respective odors, more or less modified, according to the functional activity and also to particular idiosyncracies. Copaiba diffuses its tell-tale fragrance in the same way. Sulphate of potassa is decomposed within the organism, and imparts to the sweat a hydro-sulphurous odor. Phosphate of zinc causes garlicky-smelling perspiration, etc.

In *acute alcoholism* the perspiration often has the odor of aldehyde, a peculiarity of value in diagnosis, as serving to distinguish the lethargic form of intoxication from apoplexy. I have noticed a lady who was taking *Fowler's solution of arsenic* have very offensive axillary sweats, which ceased when the medicine was discontinued.

Sufferers from *incontinence of urine* smell of this fluid, or else like mice. Similarly, *constipation* gives rise to a fecal odor of the skin, which, when perceived by the subjects themselves, frequently aids in producing hypochondria, a condition to which this class of patients is always liable.

The "*hospital odor*" is essentially variable in character, being chiefly caused by an aggregation of cutaneous smells. Hence it is that the wards devoted to women and children are perfumed with butyric acid, while those of the men proclaim the presence of alkalies and ammonia.

In *gout*, the cutaneous secretions exhale an ordor likened by Sydenham to that of whey. *Icteric patients* smell of musk; *syphilitics* of honey; *scrofula* is marked by the odor of sour beer; *intermittent fever* by that of fresh bread. In *diabetes*, when there is perspiration, it smells like hay, or rather, according to one authority, like acetone; Bouchardt thinks that the odor in this disease is intermediate between that of aldehyde and acetone, being due to a mixture, in different proportions, of these two bodies.

In *cholera*, Darsch and Porker have noticed an ammoniacal odor which they attribute to an elimination of urates in the sebaceous secretion.

In *women recently confined*, and during the *milk fever*, the perspiration, especially at night, has a sour smell. Under the influence of pestilential maladies, the skin exhales a peculiarly agreeable odor. Strange to say, this old-time observation has been confirmed by Döppner, who says that all the *plague patients* at Vetlianka diffused an odor resembling that of honey.

In febrile conditions generally, the outer integument develops a sort of *moist* odor which is quite indescribable. *Contagious fevers*, as also the *virulent disorders* (rabies, glanders, and malignant pustule), are accompanied by a putrid smell.

In *dysentery*, the sweat reveals an unmistakable odor of the dejecta, as is strikingly evident on entering a hospital ward devoted to this complaint.

In *typhoid fever*, the cutaneous order is remarkable. Béhier calls it an *odor of blood*, and Fred. Berard says that it will attract the flies even before life has left the body. However slightly manifested, it is always the immediate forerunner of death. Dr. Althaus reports that Skoda has never been misled by this indication, and Crompton, of Birmingham, also mentions it as an important clinical symptom. This effluvium of the moribund is quite unlike the *death-smell* itself, which again is also *sui generis*, and not at all allied to the odor of putridity. The *mouse like* smell belongs more properly to *typhus*. It is absurd to maintain, as Hjaltelin does, that these two fevers are marked by the same odors.

A putrid odor, of variable character, is observed in *pyosepticæmia*, *scurvy*, *bilious remittent fever*, and the watery cachexia, or *Egyptian chlorosis*, of Griesinger. The ammoniacal odor which is remarked in the course of *cerebral affections*, we think, with Lallemand, is often caused by an incessant urinary overflow.

In *acute articular rheumatism*, the sweat becomes more acid in proportion to its abundance, especially about the swollen joints. Its odor becomes markedly sour and penetrating. Some attribute these qualities to an excess of lactic acid, but this latter is itself without smell. The odor is clearly due to the presence of acetic and formic fatty acids, whether these exist originally in the rheumatic sweats, or result from a transformation of the cutaneous secretions in their entirety, and not at all to the abundance of the sweats, and their retention and decomposition, favored by a high temperature, by the immobility of the patient, and by the saturation of his long-worn garments. In refutation of this latter idea, it is sufficient to point to the profuse perspiration in *phthisis*, which never smell like those of rheumatism; neither can the rheumatic odor be prevented by frequent changes of linen or by the utmost attention to cleanliness.

In *miliary sweats*, the odor, at once acrid and nauseating, has been likened to that of vinegar, rancid oil, mouldiness, and rotten straw—this latter comparison being, in our opinion, the most accurate. This variety of perspiration ferments very easily, and hence has been described as smelling like "spoiled vinegar."

Hebra quotes Heim, of Berlin, as maintaining that each of the *eruptive fevers* has its peculiar odor, recognizable by the

experienced physician. In *measles*, we have the smell of feathers freshly plucked; in *scarlatina*, that of bread hot from the oven; in *small pox*, that of the yellow deer, or of a menagerie. These odors, in Hebra's opinion, "are not pronounced enough to be regarded as characteristic," a criticism which we do not consider altogether just. There is certainly a marked difference between the cutaneous odor in the suppurative stage of variola and that in a case of measles.

Skin diseases of whatever kind, when seated *on the genital organs or the anus, between the toes or in the axillæ*, exhale the odors peculiar to their respective localities, but with a still higher degree of fetidity. *Scrofulous sores, lymphatic dermatoses, eczema, impetigo, croûtes des gourmes, etc.*, have a feebly acid or mouldy smell. *Sebaceous acne* exhales a nauseous, rancid ordor, which is *sui generis*. *Eczema pilaris* has a repulsive fetidity, probably due to retention of extravasated products. *Rupia* is prominently characterized by its offensive odor. *Pemphigus* discharges a serum which normally has an insipid smell. When this changes to gangrenous, it announces the appearance of a malignant septicæmic form of the accompanying fever. The odors of impetigo, of rupia, etc., are doubtless derived from the decomposition of the muco purulent secretions in those diseases, and from the maceration of the exfoliated scabs in the altered fluids of the pustulous bullæ.

The *hair* possesses a normal odor which is peculiar, but scarcely definable. It varies in different races; the hair of the Chinese has a natural smell of musk, which cannot be washed off even with the aid of strong chemicals. Hairs lose their odor after falling off. Barbers can tell at once, by simply smelling at a lock, whether it was cut from the living head or made up from combings.

In *hysteria*, and especially in *hystero-epilepsy*, the hair takes on, during the paroxysm, a specific odor which is always the same, and resembles that of ozone.

In *tinea favosa*, the odor of the scalp affords a valuable diagnostic indication. Offensive and nauseating, it has been compared to the smell from a nest of mice, to that of cat's urine, and to marshy effluvia. It grows worse as long as the disease continues, but may be lessened, though never entirely got rid of by cleanliness.

This odor is entirely distinct from that of the pseudo-tineæ, especially the *tinea granulosa* of Alibert, which is a simple impetigo of the scalp, frequently offensive, but smelling like sour milk, not at all like mice.—E. Monin, *Sur les Odeurs du*

Corps Humain. Prize essay, Paris, 1885. (*Ann. d. l. Soc. de Méd. d'Anvers.*)

Veratrin in Pruritus.

In pruritus occurring about the time of the menopause, Chéron (*Gaz. des Sciences Méd.*, Sep. 27, 1884) recommends the use of veratrin, internally and externally, giving from two to six pills daily, each containing $\frac{1}{120}$ grain. Externally he uses an ointment containing from two to three grains of veratrin to the ounce of simple ointment.—*Jour. Cutan. and Vener. Dis.*, July, 1885.

Book Notices.

Micro-Chemistry of Poisons, Including their Physiological, Pathological and Legal Relations. By THEODORE G. WORMLY, M. D., Ph. D., LL. D. Professor of Chemistry and Toxicology in the Medical Department of the University of Pennsylvania. With Ninety-six Illustrations on steel. Second edition. 8vo. Philadelphia: J. B. Lippincot, Company, 1885. 8vo. Pp 784. Cloth. Price $7.50. (For sale by West, Johnstont & Co., Richmond, Va.,

There can be no doubt, in the minds of those qualified by study to criticise, that the work before us is the best manual of the kind since Taylor. It is, as the author suggests, equally adapted to the employment of the medical jurist, the physician and the general chemist—the present revision bringing its contents down to the latest time possible. The entirely new appendix here presented on the Nature, Detection and Microscopic Discrimination of the Blood, is quite worth the price of the volume to the practising physician. We are glad to see that the author has retained the system of English weights, and has not taken up the metric system. He is correct in thinking that the majority of those likely to consult his book for information are more accustomed to the use of the former, than that of the latter. The book is divided into two parts, relating first, to Inorganic Poisons, and second, to Organic Poisons, although the reviewer might be tempted to pronounce the Introduction the most useful if not the most important portion of the entire volume. Every doctor should read that part of the book, and especially with reference to the section entitled, Sources of Evidence of

Poisoning. We can recall nothing bearing upon this subject better adapted to the wants and occasional uses of the general practitioner than this introductory chapter, which treats so thoroughly of poisoning in the abstract. It would be a valuable book if printed by itself. The steel plates at the end of the appendix, illustrating microscopic crystals, and the red corpuscles of the blood of different mammals, drawn by the author's wife and daughter, are clear and guaranteed as accurate, adding a special value to the volume.

C.

Student's Manual of Electro-Therapeutics. By R. W. AMIDON, A. M., M. D., New York City. 12mo. New York and London: G. P. Putnam's Sons. 1884. Pp. 93. Cloth. Price, $1.00. (For sale by West, Johnston & Co., Richmond, Va.)

Here the author has offered, in small compass, the scientific aspect of electro-therapeutics rather than the extremely practical, and to that extent the book is an improvement over more bulky volumes. We doubt if this is as valuable a "manual" for the student of medicine as any one of several other works on the subject which we have received during the past few years. It is evidently written by a gentleman thoroughly posted on electricity and its relation to medicine, but in more than one place he shows that he is devoted mainly to the technical department of that "force" instead of the practical. A better understanding of the book may be had perhaps, by quoting the following, which shows what the intent of the author has been in publishing.

First.—To present that amount of the subject of electro-physics necessary to the proper understanding of the construction and use of medical batteries.

Second.—To point out the common, gross physiological effects of electricity.

Third.—To outline the methods of electro-diagnosis.

Fourth.—To determine the kind of electricity and its mode of application indicated in different pathological states.

We do not recommend this book for purchase except to those practitioners who make a special study of the therapeutics of the electric current. The student will find other works on the subject better suited to his needs. C.

How to Drain a House. By GEO. E. WARING, JR., M. Inst. C. E., Consulting Engineer for Sanitary Drainage, Newport, R. I. 16mo. New York: Henry Holt & Co. 1885. Pp. 222. Cloth. Price, $1.25. (By mail from Publishers.)

The intent of this handsome little book, as announced by

the author, is, to furnish practical information for householders regarding that most important subject—house drainage. So many of our fatal zymotic diseases have been traced to their causation in bad drainage, especially in city houses, that such a work deserves even more attention than it is likely to receive at the hands of the public. The subject is one of such vast importance to the heads of families, and the general ignorance concerning it is so great, that every attempt to popularize knowledge in this direction should meet with the fullest approbation and encouragement. Mr. Waring is so well qualified by his years of experience in sanitary matters to write such a manual that to praise his work is only to "gild refined gold." No doctor at all interested in hygiene should fail to read his book, and well posted as the reader may be, he will find much food for thought in its contents. It is an intensely practical book—one of the kind that should be distributed as a tract through the land—if possible, correcting the lamentable lack of information every day displayed in such matters. The diagrams accompanying the text add much to its clearness to those who have made no special study in this direction. Notwithstanding the small size of the volume it is next to impossible to properly summarize the contents in the space afforded a book notice, and we can not do better than to conclude this brief criticism by quoting these thoughtful though matter-of-fact words of Mr. Waring—"Look out well for the health-rate, and the death-rate will lose its significance." C.

Medical Diagnosis. A Manual of Clinical Methods. By J. GRAHAM BROWN, M. D., F. R. C. S. (Edin.) Late Sanior President of the Royal Medical Society of Edinburgh. Second Edition, Illustrated, 12 mo. New York and London: Bermingham & Co., 1884. Pp. 285. Cloth. Price $1.50. (For sale by West, Johnston & Co., Richmond, Va.)

There can be no doubt in the minds of thinking physicians that a work devoted to a careful description of the signs and symptoms of disease, and to pointing out their value from a diagnostic point of view, must be one of much worth if the author has served the proper apprenticeship in study and practical observation; and the reception of the first edition of this work by the profession would seem to show that Dr. Brown had complied with this requisition. We mentioned the book favorably when it first appeared, and we see nothing in the present edition to cause us to modify our first criticism. It is an excellent work on the subject, and an exceedingly handy book to refer to occasionally. The author

has endeavored to teach the practitioner to sift the symptoms of each of his cases more thoroughly, and he lays down the very best of rules for such purpose. No doctor can read the first chapter—devoted to the general aspect, condition, etc., of the patient—without feeling repaid for the time spent. The author divides his work according to the several systems—the alimentary, the hæmopoietic, the circulatory, respiratory, etc.,—and presents rules of observation, which, though not new, are offered in so clear manner that the veriest tyro must understand them and appreciate their value. Dr. Brown strikes the key-note of his work when he says that he desires to promote minute inquiry, and at the same time give the results of that inquiry more definite form. C.

Lectures on Diseases of the Rectum. By J. WILLISTON WRIGHT, M. D., Professor of Surgery in the Medical Department of the University of the City of New York. 12mo. New York and London: Bermingham & Co. 1884. Pp. 170. Cloth. Price, $1.25. (For sale by West, Johnston & Co., Richmond, Va.)

The matter of this little volume is composed of the lectures delivered by the author before the classes of the Medical Department of the New York City University during the past few years. Most of the lectures have been already published in a medical journal, directly from stenographic notes, without revision, and the book itself shows plainly in its literary characteristics the outspoken turn of thought which is frequently found in an able and careful lecturer, but never in the work of the writer who uses the pen exclusively in his study.

Notwithstanding the fact that stenographically reported lectures are rarely as valuable reading as conscientious library work by the same author, yet there is usually a charm about them (if delivered by an able man) which is rarely seen in the more formal book, and in the instance before us the rule holds good. Dr. Wright offers an excellent treatise on the subject of rectal diseases, and a reading of it convinces us that his students seldom "cut" his lectures. Although the contents of the book were originally intended for the use of undergraduates, yet we doubt if any practitioner can read it without profit. It deals with those common affections of the rectal vicinity which we are all apt to see every day, such as fistula in ano, hemorrhoids, anal pruritus, fissure, rectal stricture, prolapse of the rectum, etc. The latest and best methods of treatment of these diseases are given by the author in

a manner at once pleasant and impressive, and we are well assured that the reader of this volume will be pleased with it, as far as it goes. We of course put in our adverse criticism on the lack of an index. C.

Perils of American Women; or, A Doctor's Talk with Maiden, Wife and Mother. By G. L. AUSTIN, M. D. 18mo. Boston: Lee & Shepard. 1885. Pp. 240. Cloth. Full Gilt. Price, $2. Sold by subscription only. (From Publishers.)

This handsome little book is one of those few works written and published with an honest desire to offer to the women of our land a handbook of physiology and pathology relating entirely to the genital organs.

However well the author has performed his task (and we have little fault to find on that score) we do take issue with him on both the intent and title of the book. The volume is fully and well illustrated, but we should have a strong repugnance against introducing a book to the attention of our young daughter or unmarried sister, which would have, like this, an engraving of "a human embryo, at the twelfth week, natural size," as a frontispiece, notwithstanding one of the classes of society intended to be reached is that of "maidens." So far as the general text is concerned there is nothing to be urged in adverse criticism, as the teachings of Dr. Austin are based upon our present physiological and pathological knowledge, but there is a great deal of matter in the book which we think totally unfitted for the eye and understanding of the young "maiden" just beginning the physiological life of a woman. This book, however well adapted to the use of married ladies, is not one, we think, to be indiscriminately distributed among the members of the gentler sex. Yet it is certainly a great misfortune that girls are not better taught on the physiology of the generative organs. We have under treatment at the present writing, a young lady, aged sixteen, who was married four months ago. She had grown and developed rapidly, presenting an appearance, at her marriage, of being at least twenty years old. She has now returned to her mother's home for treatment, having been entirely broken down in fulfilling the duties of married life. We doubt very much if she would now be the sufferer she is if she had been properly informed on sexual physiology. The mothers of our land would do well to study such subjects for the benefit of their daughters, and for that purpose this book is one of the best of its class. C.

Clinical Studies on Diseases of the Eye. By Dr. FERDINAND RITTER VON ARLT, Professor of Ophthalmology in Vienna. Translated by Dr. LYMAN WARE, M. D., Surgeon to the Illinois Charitable Eye and Ear Infirmary, etc. 8vo. Philadelphia: P. Blakiston, Son & Co. 1885. Pp. 325. Cloth. Price, $2.50. (For sale by West, Johnston & Co., Richmond, Va.)

This work is presented for the use of the general practitioner who may be called upon to treat those frequent affections of the conjunctiva, cornea, sclerotic, iris and ciliary body occurring in ordinary practice. The writer, standing in the front rank of German ophthalmologists, teaches in one of the most popular eye-clinics in Vienna, and the volume is a transcript of some of his best lectures. It is a good reference book, even in this day of books on this subject, many of which latter "are each a world," and is likely to remain one of the best of the translated works on ophthalmology for a long time. Like many writers of his nation, the author is fonder of dwelling upon the morbid processes of the different eye affections than upon the treatment required, but Prof. Arlt gives the very latest and best methods of therapeutics known at his time of writing (1883), and the translator, Dr. Ware, has ably supplemented his work in this direction by a full explanation of the employment of the new local anæsthetic, in those parts of the book where such explanation was neceessary. The work of the translator is deserving of all praise, as he has fairly presented not only the ideas of the lecturer, but also given us, as far as possible, the manner of language in which they were originally clothed. To perform this task required something more than a common knowledge of German, and Prof. Arlt should congratulate himself that he has had the able assistance of Dr. Ware in presenting his work to the profession of America. C.

Insanity and Allied Neuroses: Practical and Clinical. By GEORGE H. SAVAGE, M. D., M. R. C. P., Lecturer on Mental Diseases at Guy's Hospital, London, etc. 1884. Philadelphia: Henry C. Lea's Son & Co. 12mo. Pp. 544. (For sale by West, Johnston & Co., Richmond, Va.)

A first-class clinical manual on the subject, well adapted, in almost every respect, not only to the usages of the general practitioner, but also to the needs of the student of medicine. The author, for over twelve years a prominent medical officer in one of the large English insane asylums (Bethlehem), has enjoyed exceptional opportunities of observation, and has so well employed them that he is a standard writer on the subject. There is so much that is pleasant—outside of the in-

struction conveyed—in his manner of writing, that we could wish all our subscribers were able to read the book. Although many of the expressions are English, and entirely foreign to our style of writing, there is something in it which makes its contents not only valuable as a reference work, but also as exceedingly easy to read—a merit, we regret to say, often lacking in books treating on similar matters. Dr. Savage in this book pays special attention to the legal relationships of the insane, and he well and thoroughly fulfills his prefatory promise to make plain the duties of the physician who has to be responsible for their safety and general welfare. In his chapter devoted to the meaning of insanity, etc., he places an old truism in plain, concise words, viz: "no person is perfectly sane in all his mental faculties, any more than he is perfectly healthy in body." He describes—as well as any writer can—that border-land of insanity—eccentricity, and offers some very valuable hints on the delicate and difficult points of diagnosis usually to be found at this phase of the disease. He believes—contrary to the usual English custom—that the man who destroys his own life is not necessarily a lunatic, but may be afflicted with a general intellectual disturbance not pathological. We regret exceedingly that we cannot present to our readers some of the many quotations which we had marked for such reference, because of our limitation of space, but strongly advise the purchase of the book.

C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Typhoid Fever and Low Water in Wells. By HENRY B. BAKER, M. D., Lansing, Mich. [A most excellent study of the causation of this scourge from contaminated water. The writer shows plainly the intimate connection existing between disease and an impure water supply. The explanation of the condition of low water in wells producing fever seems clear and probable.] (Reprint from the *Annual Report of the Michigan State Board of Health for the year* 1884.) Pp. 26.

Clinical Illustration of the Value of Combining Motion with Extension in the Treatment of Disease of the Hip-Joint. By BENJAMIN LEE, A. M., M. D., Ph. D., Philadelphia, Pa. [This case is reported as one where the joint remains in a healthy condition after the lapse of fourteen years, proving

the treatment adopted to be that precisely suited to its needs.] (Extracted from the *Transactions of the Medical Society of the State of Pennsylvania for* 1884.) Pp. 3.

Massage: The Latest Handmaid of Medicine. By the same author. [An excellent description of the various uses and modes of application of this remedial measure.] (Extracted from the *Transactions of the Medical Society of the State of Pennsylvania for* 1884.) Pp. 12.

Specialities and Their Relation to the Medical Profession. By L. Duncan Bulkley, A. M., M. D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, Outside Patient Department, etc. [This essay, read before the American Academy of Medicine, at Baltimore, October 29th, 1884, presented the subject of specialism in its correct light. Dr. Bulkley strongly deprecates the usual custom of a young man devoting himself to a specialty immediately upon graduation, making even during his student life other branches of study subservient to that one he intends following in his practice, but claims that no physician can properly devote himself to a line of special work until after he has been fully qualified as a general practitioner.] (Reprint from the *Journal of the American Medical Association*, December 13, 1884.) Pp. 16.

The Spinal Arthropathies. (*A Clinical Report of Six Cases of Charcot's Joints.*) With illustrations. By A. Sydney Roberts, M. D., Surgeon to the Philadelphia Hospital, etc. [These six cases reported before the Philadelphia Neurological Society are interesting simply as a clinical study.] (Reprinted from the *Medical News*, February 14, 1885.) Pp. 15.

Medical Jurisprudence in Divorce. By Carl H. von Klein, A. M., M. D., Dayton, Ohio. [There is much in this little essay, read before the "Ohio State Bar Association," Dec. 30, 1884, which will furnish the thoughtful practitioner food for reflection, and no doubt he will wish that the subject had been carried still further. The matter referred to by the writer is something which has not been sufficiently developed in medical literature. It is a pity that those members of the profession who can, from their experience, add much to our knowledge on this important subject, have not so done; and that the legal profession has not taken more cognizance of it. It is greatly to be desired that future writers on medico-legal questions will present the points hinted at here more fully.] (Reprint from the *Journal of the American Medical Association*, Feb. 14, 1885.) Pp. 8.

The Relations between Tuberculous Joint Disease and General Tuberculosis. By FREDERIC S. DENNIS, M. D., New York City. [This article—read before the New York State Association, Nov. 19, 1884—is marked by the usual care and faithfulness of description characteristic of the surgical professor of Bellevue college, and shows his thorough understanding of the subject. It is worth close attention.] (Reprinted from the *New York Medical Journal*, Dec. 27, 1884.) Pp. 19.

A Case of Primary Epithelioma of the Tonsil. By F. DONALDSON, Jr., B. A., M. D., Chief of Clinic for Throat and Chest, University of Maryland. [Dr. Donaldson here gives a typical case of this rare disease, fully describing the pathological changes observed as well as the clinical study. He also furnishes the reader with a first-class bibliography relating to this special matter, which is in itself of value.] (Reprinted from the *Medical Record*, March 7, 1885.) Pp. 8.

Does Tobacco Produce Amblyopia? By W. FRANKLIN COLEMAN, M. D., M. R. C. S, Professor of Diseases of Eye and Ear, Baltimore Polyclinic and Post-Graduate Medical School, etc. [The writer, although acknowledging the fact that the abuse of alcohol, in connection with tobacco, is usually the cause of this disease, claims that the habitual use of tobacco alone is responsible for many cases of amblyopia, and very strongly presents his views on the subject.] (Reprint from the *Maryland Medical Journal*, March 14, 1885.) Pp. 16.

On Railroad Injuries of the Extremities of the Human Body, with Observations on the Site of Amputation and Subsequent Treatment of the Stump. By THEODORE R. VARICK, M. D., Medical Director and Surgeon to St. Francis' Hospital, etc., Jersey City, N. J. [Dr. Varick has in this little essay presented a consideration of the subject in a condensed manner, and the paper is well worth examination. When Dr. Varick read the article before the Surgical Section of the American Medical Association in May, 1884, we thought his views were excellent, and a careful perusal of the reprint convinces us of the fact. We believe that Dr. Varick was the first surgeon in this country to use a "Trendlenburg spear," although this is not spoken of in his paper.] Pp. 16.

Progress of Otology. By LAURENCE TURNBULL, M. D., Philadelphia, Pa., Aural Surgeon Jefferson Medical College Hospital, etc. [These few pages show a careful collection

by Dr. Turnbull of all that has been practically valuable in the medical literature of 1884, as far as could be ascertained, relating to aural diseases.] (Reprint from *Medical and Surgical Reporter*, November 1 and 8, 1884.) Pp. 8.

Report on the Diseases of the Ear in Locomotive and other Engineers, Firemen and Conductors, which may Endanger the Lives of the Traveling Public. By the same author. [An excellent and full report on this vital subject, read before the Section on Ophthalmology, Otology and Laryngology of the American Medical Association, May, 1884.] (Reprint from the *Journal of the American Medical Association*, November 29, 1884.] Pp. 12.

Permanganate of Potassium: Its Action and Uses. By ROBERTS BARTHOLOW, M. D., LL. D., Professor of Materia Medica, General Therapeutics and Hygiene, in the Jefferson Medical College, Philadelphia, etc. [It is a fact, as the writer states, that there is a general uncertainty among the profession as to the value of this remedy, and in this article he has taken pains to denote its standard of worth. Dr. Bartholow finds in its action much to commend. It is almost needless to call attention to the fact that some of the first therapeutists in Great Britain have very highly recommended this salt in amenorrhœa, and this employment of the permanganate is strongly seconded by Prof. Galliard Thomas, as well as the author of this paper.] (Reprint from the *Medical News*, November 22, 1884.) Pp. 15.

"*An Enemy Came and Sowed Tares.*" By JOSEPH EASTMAN, M. D., Professor of Gynecology and Clinical Surgery, College of Physicians and Surgeons, Indianapolis, Ind., etc. [In this paper the writer presents strong arguments to show that the operation for repair of lacerated uterine cervices by suturing is more frequently resorted to than is absolutely necessary, and also claims that such laceration is too often due to bungling attempts to hasten labor. There is much in what he says to claim the attention of the thoughtful practitioner.] (Reprint from the *Weekly Medical Review*, March 7 and 14, 1885. Pp. 20.

The Treatment of Diabetes Mellitus. By AUSTIN FLINT, JR., M. D , Professor of Physiology in Bellevue Hospital Medical College. [As might be expected from the reputation of the author, this is the best monograph on the subject ever presented to the profession. Every doctor should read it.] (Reprint from the *Journal of the American Medical Association*, July 12, 1884.) Pp. 35.

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Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the editors. Rejected articles held one month at disposal of writer.

Editorial.

The Alcoholic Prohibition Question.

Most of the States and cities have established, or are establishing boards of health to remove the preventable causes of disease. Such Boards, in many instances, have done great good in the prevention of some of the epidemic destroyers of the human race. Vaccination is now so authoritatively insisted on, and means for its general performance are so well provided, that small-pox, as an epidemic, scarcely need be feared hereafter. Enforced cleanliness, disinfection and quarantine systems are being so insisted on that the ravages of the cholera and yellow fever are not as threatening as they were a few years ago. Miasmatic districts are being so well cleared up and drained, and disinfected of animal decompositions that typhoid fever is becoming less frequent, and a milder disease than it was twenty years ago, and distinctly swamp malarial diseases are becoming rare in the cities, while large sections of heretofore uninhabitable country are being made arable and healthful. These are encouraging results, and evidence the wisdom of those States that have properly equipped State and local boards of health.

But there is a cause of disease as ripe with serious and fatal results as the germs of any of the diseases just alluded to, which is more than partially removable by the help of proper Legislative enactments and an indiscriminating police. It refers to the alcoholic question.

We cannot conscientiously go so far as many enthusiasts, and ask for the total prohibition of the manufacture of

whiskey, brandy, wine, beer, etc. These things, if they have no other use, are too valuable for medicinal purposes to wish their manufacture and sale prohibited by law. But laws can be framed which will so act as to close up bar-rooms, wine and beer gardens, etc., if need be, or else permit them to exist under such stringent regulations as to deprive parties of pleasure in frequenting such places for alcoholic indulgencies. "Social drinking" is the principal cause of drunkenness, and bar rooms and restaurants and "gardens" are the principal places where the habit is begun and carried to excess. It is at the county court-houses on court or other public days that the countryman mostly gets under the influence of whiskey. It is at the bar-rooms around the places of public amusement, political conventions, and the like that the visitors generally get tight. It is generally towards 11 and 12 o'clock at night that staggering men are mostly seen, and boisterous drunken yells are mostly heard along the streets that lead from such "gardens," restaurants and bar-rooms. The parties have come from such public places of "social enjoyment" without having the healthful restraint of home and family influences thrown around them, and, as a result, drunkenness has grown to be a widespread public evil demanding correction. We don't intend to say that such specific legislation as is here intimated will remove all the evil, but we do mean to say that it would very greatly lessen the *abuse* of the privilege of intoxicating drinking. Many are allured by the bright signs and open doors of bar rooms and the cheapness of drinks to enter them merely for sensual pleasure's sake that would have passed on happily to their homes, to be welcomed in soberness by the loved and loving ones there.

But we do not propose here to suggest the exact legislation needed in given cases. We simply desire to remark upon the propriety of remitting such questions to the State Boards of Health to frame suitable wholesome laws for adoption by State Legislatures—looking to the suppression of the enormous vices entailed upon mind and body by abuses of alcoholic indulgencies. Drunkenness and other alcoholic disorders or diseases are assuredly preventable, and their prevention are subjects for the especial consideration of Boards of Health—regardless of political parties or principles. If Boards of Health have the right and the power to remove the causes of other preventable diseases, they should have the right to remove the *chiefest* cause perhaps of preventable disease—abuses of alcoholic drinking. Alcoholic diseases are undoubtedly preventable. None will deny this.

Virginia State Board of Medical Examiners.

From a letter received from Dr. Wm. C. Dabney, of Charlottesville Va., President of the Board, we are informed that there will be a meeting of the Virginia State Board of Medical Examiners for the purpose of examining candidates for practice of medicine in Virginia, at Alleghany Springs, Montgomery Co., Va., Wednesday, September 16th, 1885. The Medical Society of Virginia is to meet at the Springs on September 15th, and the time and place selected by the Board for examination is therefore very opportune. All applicants for examination should at once address the Secretary of the Board, Dr. Hugh T. Nelson, Charlottesville, Va.

Dr. Ferran's Cholera-Prevention Inoculations.

When we read in the daily papers some weeks ago that Dr. Ferran, of Valencia, Spain, had determined to institute experiments in inoculations with attenuated cholera virus at Aleria, near Valencia, where the epidemic was raging with fearful havoc, we confess we were skeptical as to hope of success in either materially checking the epidemic or modifying the severity of the attacks in those afflicted with the disease. According to Drs. Lander Brunton and Pye-Smith, and other eminent authorities at this time, "cholera differs from other infective diseases in this respect, that the living organisms which may form the germs of the disease are not distributed throughout the blood and tissues generally, as in the case of anthrax, but are confined to the intestinal canal." Dr. Ferran reports for himself, after being in Aleria for some time, that of the 10,500 inhabitants who were not inoculated, cholera had attacked 64, and 30 died. Of the 5,432 who were inoculated with the attenuated cholera virus by Dr. Ferran at the time of his report, it had attacked only seven, and had proved fatal in no given case. This was an encouraging report, and we prepared ourselves to hear of another grand discovery in preventive medicine, and we watched eagerly for further reports. But a recent number of the *British Medical Journal* contains a translation from a well-known Spanish provincial paper, issued June 18th, which, in effect says, "Dr. Ferran has not been able to impede the spread of the epidemic, and, afterwards, has disturbed the tranquility of the towns, producing extraordinary excitement. * * * For my own part," the correspondent adds, "it is clear the system of Ferran, of cultivating microbes and of producing 'slight cases' of cholera, is extremely hazardous, and able to produce fatal results. * * * I only men-

tion as eloquent facts that the condition of the four last inoculated cases is very grave; that the medical man who died a few days ago had been inoculated, and that in the village, many of those formerly inoculated had also died."

The "Dr. Ferran excitement" will soon die away and be forgotten, and another enthusiast will hereafter start some other "excitement" having about the same amount of rational probability of success. Still we must not be too sweeping in discouraging hopes that have been begun. We must not forget that Jenner was thought to be a "crank." Whenever experiments like those of Dr. Ferran are again undertaken, instead of deriding the author, let us rather simply watch the progress of the investigations, and if unsuccessful, let the results be recorded, without ridiculing the effort to learn and to do good.

The McIntosh Galvanic and Faradic Battery Co.

This enterprising Company, of Chicago, Ill., has removed its office and works to 300 and 302 Dearborn street, where it has more and better rooms, and where additional machinery has been introduced to meet the enlarged demands. Their department for repairing batteries, microscopes, etc., is now complete. The Chicago *Tribune* of recent date contains a full notice of the successful competition of this Company for the gold medal at the New Orleans Exposition.

Monthly Financial Magazine.

About October 1st, 1885, W. H. Kane, Esq., of Jacksonville, Florida, proposes to publish a journal of the kind indicated. It will relate to general finance, and serve as a handbook for merchants and booksellers. To all such parties we commend the undertaking, upon the authority of the *Florida Daily Times Union*. Mr. Kane was formerly associated with the late "American Counting Room," of New York city.

International Medical Congress of 1887.

We are not surprised, and must confess being glad, at seeing with what almost unanimous action on the part of the leading members of the profession the result of the Chicago session of the newly-appointed committee has been met. The resignation of nearly every prominent appointee on the full committees and sections made at that session shows a feeling of dignity and self-respect; and the fact that so many physicians in different parts of the country have expressed their sympathy with that action is plainly indicative of a

feeling that something is more than wrong in the position taken by the American Medical Association at its late meeting in New Orleans. The thing to be sorry for is not the fact of these meetings in different cities and the action there taken by the doctors present, but the fact that all this was made a necessity by the personal ambition of some men who felt that they had been slighted.

The medical press of England has already referred in no complimentary terms to this last mentioned subject, and the action of the Association has not tended to increase the respect of our professional brethren across the water.

It is most certain that unless some new action is taken in reference to the committee formation, the Congress will be a failure—a thing which must not be allowed to occur, and although we acknowledge the shortness of the time which will elapse between the 1886 meeting of the American Medical Association and the 1887 meeting of the International Medical Congress, it seems to us the only thing now to do, is, at the next Association meeting, to wipe out by careful legislation all existing committees, and appoint an entirely new one—not on the narrow basis of a printed set of rules rapidly becoming obsolete by the advance of thought and charity—but on the broad platform of fraternity, honesty of purpose and dignity.

Medical Society of Virginia.

The Executive Committee will issue the usual annual Announcement Circular of the Session, 1885, about August 10th. The Society will meet this year at Alleghany Springs, Montgomery county, Tuesday, September 15th, and will be in session through Thursday night—possibly a part of Friday—of the same week. Applications for Fellowship are coming in well; encouraging reports are being received from every quarter; a number of excellent papers are promised by able writers, and a large attendance is expected. Inquiries about the Society addressed to Dr. Landon B. Edwards, Secretary, Richmond, Va., will receive prompt attention.

Painless Extraction of Teeth.—Dr. N. J. Hepburn, of New York, says in the *Independent Practitioner*: "Dilute the tincture of cannabis indica made from the purified extract with from three to five parts of water. Rub this over the gums with the finger for a short time, and also dip the warmed beaks of the forceps in it before their application to the teeth."

Obituary Record.

John Staige Davis, M. D.

This widely known and beloved Professor of Anatomy and Materia Medica and Therapeutics of the University of Virginia died at his home, at the University, July 17th, 1885. He was born in Albemarle county, Va., October 1st, 1824, and hence was in his sixty-first year.

Dr. Davis' father was Professor of Law and Chairman of the Faculty for several years at the University of Virginia until he was killed by one of the students in 1840, while attempting to check a marauding party. Dr. Davis himself graduated academically at the University, and in 1841 received from the same institution his degree of Doctor of Medicine. In 1842, he began the practice of medicine in Jefferson county, (now West) Virginia, but removed to Charlottesville, Va., in 1845, when he was made Demonstrator of Anatomy at the University of Virginia. About 1850, he was made Professor of Anatomy and of Materia Medica and Therapeutics in that institution, which position he held till his death.

He was exceedingly accurate in all of his information, and as an instructor was one of the very best we ever knew. His demonstrations were always precise, and his mode of imparting information very interesting, so that it was a pleasure to study under his tuition. He was a cautious practitioner, excelling in diagnosis and in the principles which should govern the application of therapeutical knowledge. He was a modest man, and as such was constantly declining the acceptance of honors that were offered him. He was a true friend—permitting no removable obstacle to prevent his doing any favor in his power. He was a just man—allowing no intimacy of acquaintance to lead him to bestow an unmerited compliment, nor permitting any criticisms by others to warp his judgment as to the worth of those with whom he was not intimately acquainted. He was an earnest worker in every field of usefulness in which he was placed.

As a Fellow of the Medical Society of Virginia, he was alive to its every interest and good work, giving it help and counsel whenever opportunity offered. He was one of the

original Vice-Presidents of the Society (1870–71), but never allowed the Society to bestow upon him a greater honor. Above all, he was a Christian gentleman, which principle of life he made to shine out in every circle in which he was thrown, giving him immense influence in the profession and with the people. He will long live in the memory and affections of thousands who knew him, either at the University or as Resident Physician during the summer months at the Rockbridge Alum Springs.

Dr. Davis was stricken with partial paralysis some nine years ago. Afterwards, he had a slighter stroke. The third and fatal stroke occurred about two months ago, rendering him completely hemiplegic. Notwithstanding the constant attention of excellent physicians and competent and affectionate nurses, he gradually sank to rest on the evening of July 17th, 1885, surrounded by his family and friends.

In 1847, Dr. Davis married Miss Lucy Landon Blackford, who died in 1859. In 1865, he was again married, his bride then being Miss Caroline K. Hill, who survives him.

Dr. R. M. Gibson,

of Portsmouth, Ohio, died on July 3d, at his home in that city, after suffering four months with empyema. He was an earnest worker in the profession, a quick thinker, a true friend, and, above all, a good man. Although not yet thirty-five years of age, he had made a name as a successful practitioner in that section of his State, and would in a few years have reaped a prosperous reward for his labor. The Portsmouth Academy of Medicine, of which he was one of the most active members, passed appropriate resolutions of respect and sympathy on the sad event, and ordered their hall of meeting to be draped in mourning for the space of six months.

Dr. Frank Spencer

died at his home, in Lynchburg, Va., about July 1st, of the current year, after suffering a long time from the distressing effects of cancer.

He came into this State as Surgeon to a Maryland regiment, serving throughout the civil war on the Confederate side. He was locally prominent in the profession, and took great interest in all that tended to the advancement of medical science. Lynchburg loses one of its best citizens in his death.

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Original Communications.

ART. I.—**Partial Inversion of the Uterus Evoked by Intra-Uterine Tumors.** By GEORGE TUCKER HARRISON, M.A., M.D., Honorary Fellow Medical Society of Virginia; Assistant Surgeon Woman's Hospital, New York, N. Y.

Whether regarded from a diagnostic or therapeutic point of view, that form of partial inversion of the uterus, which takes its origin in a tumor implanted in the uterine structure, exhibits characteristics of great practical importance, and may well claim our earnest study. The mechanism of the production of the inversion in these circumstances is also a subject which has engaged the attention of many distinguished gynæcologists, but the problem at present cannot be considered as fully solved. To discuss anew the questions pertaining to this interesting theme is the object of this paper.

Before, however, entering upon the critical study of this subject, it will facilitate our task and conduce to the clearer comprehension of the phenomena if we give the clinical history of several illustrative cases. For the history of the first case, I am indebted to Dr. Von Vorst, at the time Senior House Surgeon of the Woman's Hospital.

Mrs. E. B—— was admitted into the Woman's Hospital April 10th, 1878, Dr. T. Addis Emmet's disease. She was sent to the Hospital by Dr. A. E. M. Purdy, of this city. She is 39 years of age, and has been married twenty-three years. She has given birth to two children at term, and has had six miscarriages; the last miscarriage occurred three years ago. All these miscarriages took place about the third month of pregnancy. Menstruation first appeared about the age of 15, and recurred regularly. The amount of blood lost at each menstrual epoch has always been large, the flow generally lasting eight days. She has always suffered from dysmenorrhœa. Fifteen months ago she began to suffer from menorrhagia, and during the last eight months has never been free of "a show." The loss of blood, however, has never been so profuse as to cause much prostration.

Two months ago she became aware of the existence of a tumor in the vagina. She complains now of pain in each inguinal region, occasionally shooting down the limbs. During the past two months, locomotion has been almost impossible, and she has not been able to attend to her household duties. Examination *per vaginam* reveals the existence of a tumor in the vagina about the size of a duck's egg. This tumor has its largest portion below, which is rounded in form, and above, gradually diminishing in size and becoming pedunculated, is embraced by the ring formed by the external os uteri. The sound can be passed in front of the tumor through the os externum to the depth of an inch and a half, while behind it penetrates only to the extent of an inch. As the patient has thick abdominal walls, bimanual palpation does not yield such plain and unmistakable data that an exact diagnosis can be founded by this method of examination. Passing the forefinger of the left hand through the os externum, the patient lying on her back, it penetrated to the depth of an inch, and sweeping it around the pedicle of the tumor, it seems as if around its entire periphery the cervix goes over into the pedicle.

April 23d.—Patient anæsthetized. Several of the Visiting Staff of the Hospital being present, Dr. Emmet invited them to examine the patient; but the opinions expressed in regard to the diagnosis agreed but in the one particular—that an inversion did not exist. On the hypothesis that it might be a case of inversion, Dr. Emmet made repeated attempts at reduction, but without success.

Aprtl 30th.—The patient being under ether, and in Sims' position, the speculum was introduced and the tumor pulled

down towards the ostium vaginæ, when the inferior part was found to have undergone a morbid change in its appearance; it looked now like uterine tissue about to slough. Cutting off this tissue with the scissors, the glistening surface of a myoma presented itself. This was rapidly enucleated by Dr. Emmet. After its removal, a shell of uterine tissue was left, in which the myoma had been embedded, and which was oblated by the écraseur. In attempting to seize an artery from which the blood was spurting, and which had just been severed by the écraseur, I was struck by the peculiar way in which it retracted within the cervical canal, and so eluded the grasp of the forceps. The explanation of this phenomenon was the fruit of later experience. Hot water was now thrown into the cervical canal, followed by Churchill's tincture of iodine, when all hæmorrhage was at once arrested.

May 23d.—I examined the patient carefully, making use especially of bimanual palpation, and now found that the sound penetrated to the depth of $3\frac{3}{4}$ inches. The body of the uterus could be plainly felt above the symphysis pubis as a large globular body. In a word, after the revelation of the myoma, and the removal of the tissue in which it was embedded, the organ had spontaneously re-inverted itself, and hence the explanation of the peculiar mode in which the artery withdrew within the cervical canal, as just mentioned.

A very instructive case, presenting many features in common with the one just narrated, was reported by Spiegelberg, who, alas for science, is now no more, in the *Archiv. für Gynækologie*, Vierter Band, p. 351. I condense the account he gives:

"Mrs. M. S——, 54 years old, was received into the gynæcological clinique on the 5th of May, 1868. Her history was the following: Began to menstruate late, never conceived, and had always been well. At age of 48 menstruation ceased; it had recurred regularly up to that time. Some two or three years ago leucorrhæa was noticed. At first scanty, it became a year ago more copious, and gradually assumed the character of a sanguinolent, saneous discharge, with an offensive odor. In addition, intense labor-like pains developed, which radiated from the hips to the symphysis pubis, and were especially annoying at night. The patient perceptibly grew worse. In the beginning of April her physician was able to examine her for the first

time. He found the os uteri quite wide and dilatable, and filled by a tumor-like mass, which had the consistence of a placenta; posteriorily it had undergone ulceration, and was soft above; it had increased in extent, filled the uterine cavity, and was attached, with a broad base, to the fundus uteri. He could not demonstrate the existence of an inversion, and regarded the growth as an ulcerated fibroid. The friable parts of the tumor were removed by him with the fingers, and injections of a solution of iron were ordered. Fourteen days later, finding the neoplasm again proliferating more extensively, so that it even projected from the os uteri, and as only insignificant particles could be detached with the finger, he seized the easily attainable part with a pair of forceps, and twisted it off. He then entered higher up in the uterine cavity with a sharp tenaculum; thrust this into the new formation, and brought forth a large piece by traction. Vomiting and faintness now appeared, so that further attempts at operative intervention were discontinued. The bleeding in all these manipulations was exceedingly slight, and the patient was recovered from them. Although the subjective condition appeared tolerable, the woman quickly grew worse; decided œdema of the lower extremities developed, and the discharge from the vagina became exceedingly offensive.

In this condition the patient came into the clinique with the diagnosis of an ulcerated polypus. I found a senile vagina, filled by a fleshy tumor, with a torn, lobulated, ulcerated surface, quite friable, which projected down to a distance of 2.5 cm. from the introitus, and was about as large in extent as an apple. The edges of the os uteri were free and widely extended; the tumor went through them with a thick pedicle. Small nodules were situated on the posterior wall of the cœcum, in the mucous membrane, in the region of the inner os uteri. The uterus appeared small, deeply situated, and, on its upper part, somewhat depressed, through the somewhat distended abdominal coverings. The sound penetrated into the uterine cavity to the depth, anteriorily, of 4, posteriorly, of 3 cm. From the rectum I could not attain to the upper part of the organ; the uterus lay between the catheter, lying in the bladder, and the rectum. The patient exhibited the appearance of excessive anæmia and exhaustion; the inguinal glands were not swollen. The diagnosis made (May 7th) was polypous proliferation of the posterior wall of the uterine body and fundus, with partial—probably artificial—inversion. In view of the critical condition of the

patient, I resolved upon the immediate ablation of the neoplasm, and I believed that the inverted part could be certainly avoided if I kept the instrument close to the transition of the tumor (lying in the vagina) into the pedicle going through the os uteri. For the avoidance of excessive hæmorrhage in the operation, I chose the écraseur, which was easily applied close to the edge of the external os uteri, without preceding fixation of the tumor, and consequently without drawing the latter downwards. The separation of the tissues by the écraseur excited intense expressions of pain. The patient became weak, and vomited; immediately after the operation, the pulse was very small and slow, the face collapsed; but she was recovered from this shock. The tumor, removed, showed on the suaface of separation the opening into a smooth, walled-folded cavity, and I immediately from this recognized what I had before me, and my error. The momentary recovery from the shock of the operation did not last long; the woman collapsed visibly with intense pains in the abdomen, and died after about thirty hours, with the phenomena of deep collapse and peritonitis. * * * The ablated body of the uterus (Prof. Waldeyer) had a rounded form, $5\frac{1}{2}$ cm. in length, and on the surface of the separation a breadth of 4 cm. The opening of entrance into the inversion funnel possessed folded edges, and just admitted the little finger. From the bottom of the cavity mounted up the tubes, inverted by serous tissue, and each accompanied by a small artery and two veins. They felt hard, and were separately twisted; below they were all gradually lost in the uterine wall, 1.5 cm. thick at the lateral angles of the cavity."

The third case which I will cite occurred in my private practice, aad an account of it was embodied in a paper read before the New York Obstetrical Society December 4th, 1877. I quote from that paper*:

"In August last (1876), I was consulted by Miss L——, 38 years of age, and single, who gave this history of herself: She first commenced to menstruate at the age of 16. Menstruatioh recurred regularly, and there was no deviation from a healthy type, except that she suffered always more or less dysmenorrhœa, until last Spring a year ago. About that time her menstruation began to be more profuse. This symptom has been growing worse during the past year. About three weeks ago new symptoms showed themselves,

* Vide *Tranasctions of the New York Obst. Soc.*, 1876-78, p. 345.

consisting of pain in the hypogastrium, over the sacrum, in the inguinal region, and extending down the thighs. She also complains of frequent micturition. Of late these pains have increased in intensity, so as to deprive her of rest at night.

Status Præsens.—The patient is a tall woman, of large frame, but pale and anæmic. Physical exploration *per vaginam* revealed the fact that the cervical canal was occupied by a polypoid mass, which extended down to the external os uteri, but did not protrude beyond it. The latter was slightly dilated, but not sufficiently so as to enable me to judge of the size of the growth. Bimanual palpation was not attended with any results, as there was a large amount of fat in the omentum and in the abdominal walls, and the latter were more or less rigid. By means of Sims' speculum, a fleshy growth was brought into view, situated just within the external os uteri. Having decided upon the ablation of the neoplasm, I introduced a sponge tent a few days after my first examination, following by a second the next day.

On the removal of the second tent, about twenty-four hours after its first insertion, I found, on examination *per vaginam* (the patient being under ether), that the os uteri and cervical canal were not so well dilated as I had expected to find them. I observed at the same time that the infra vaginal portion of the cervix seemed to be unnaturally short. The mass presenting at the external os uteri was ascertained by the touching finger to be a proliferating growth, as it were, from a firm fleshy intrauterine polypus, senile on a broad basis, and apparently attached to the right side of the body of the uterus, projecting into and filling up the cervical canal. After excising the proliferating mass, which was soft and friable, and about the size of a filbert, I seized the fleshy growth, which I took to be a polypus, with a strong pair of volsella forceps; and passing this instrument over to the hand of an assistant, I enjoined upon him the duty of exercising firm and steady traction. Guided by the finger, I proceeded to the extirpation of the supposed polypus by means of the scissors. On the right, at a short distance within the cervical canal, the finger was arrested by the attachment of the growth; but sweeping the finger over the rounded protuberance, and bearing to the left, it penetrated to a greater depth, to the extent of an inch or more. That I could not pass the finger farther in I explained by the fact that the growth encroached so largely upon the uterine canal, and by the further

fact that sufficient dilatation had not been obtained, though the tent apparently entered the uterine cavity. My mind being completely possessed by the idea that I had a polypus to deal with, I was unable to draw the proper inferences from any peculiarities that the case offered at various steps, and which under other circumstances might have led me to doubt the correctness of my diagnosis. Thus it was that I could deliberately proceed to the entire extirpation of the rounded polypoid growth, or rather apparent submucous myoma; and when, in my last cut, I recognized the fact that I had entered the abdominal cavity, I thought that I had simply a fibroid tumor deeply imbedded in the thickness of the uterine wall, covered by a thin layer of peritoneum, and that the latter had been removed with the tumor. On withdrawing the volsella, however, with the extirpated portion held in its grasp, I saw at once that I had taken off the right corner, a portion of the fundus, and a large segment of the body of the uterus, including also the right ovary and a part of the right broad ligament.

The patient reacted from the shock of the operation without difficulty, the amount of hœmorrhage having been very slight. Partial peritonitis was developed soon, but progressed favorably, and the temperature never rose beyond 103° F."

In this operation I had the able assistance of Drs. J. Harvie Dew and B. Thompson, of this city. The further history of the case can be given in a few words. About eight months subsequent to the operation, she died, with the symptoms of exhaustion. The clinical phenomena were such that I felt warranted in drawing the inference that the original growth that caused the partial inversion was a sarcoma, and that the further extension and development of the sarcomatous infiltration was the cause of her death.

At the time I reported the case to the Obstetrical Society, I was under the impression that it was an intestinal myoma. That a microscopical examination was not made was owing to the fact that the growth was inadvertently thrown away by one of the attendants when the operation was performed.

The reader will doubtless be reminded by this case of a similar one quoted by Dr. Thomas,* as occurring in the practice of the late Dr. C. A. Budd, of this city. Dr. Thomas

* Vide *Thomas on the Diseases of Women* (5th Ed.), p. 455.

mentions a case of like nature which occurred in his own practice.*

In commenting upon Dr. Budd's case, Dr. Thomas says: "The case, which was one of partial inversion, was not susceptible to diagnosis." That it is exceedingly difficult to diagnosticate a partial inversion, when covered by an intrauterine growth, cannot be denied. The all-important question, however, is: Are the difficulties in the way of diagnosis insurmountable? I think not, as a rule. The fault committed is either that a myoma or other growth, being diagnosticated, the inversion is totally overlooked, or else, as in the case of Spreigelberg, a slight inversion is diagnosticated, but the degree is underestimated.

What, now, are the criteria which may be relied on for guidance, and what methods for physical exploration are to be brought into play, as aids to diagnosis in these circumstances?

In some cases accurate examination of the pedicle will serve to show that it is softer than the tumor itself, and thus awaken suspicion that it may be formed by the uterine wall, which has undergone partial inversion. In other exceptional instances a groove has been found to indicate the transition of the tumor into uterine tissue. At times the difference of color between the tumor and the uterine tissue may furnish valuable diagnostic aid.

The sensibility of the pedicle, when subject to pressure, has been dwelt upon by some authors, but this is rather a fallacious guide to diagnosis, as in some cases it was found to exist while in others it was quite wanting.

A peculiar phenomenon, which may accompany partial inversion of the lower part of the uterus, and which arrested the attention of Klole† in a case coming under his observation, is the flexion of the fundus directed toward the point of inversion. "This flexion," says Werth,‡ "must originate in consequence of the shortening which the uterine wall, affected by the inversion, undergoes, and of a traction in this way exerted on the fundus."

* Vide *Transactions of New York Obstetrical Soc*, 1876-78, p. 348.
† Vide *Path. Anat. of the Female Sex. Organs*, *p.* 104.
‡ *Archiv. für Gynœkologie*, 22 *Bd. Erste Hft*, *p.* 71.

Scanzoni recommends in the warmest terms a manœuvre which he found of the greatest utility in a case of inversion, attended with extraordinary difficulties of diagnosis. "As well,"* he remarks, "in polypi which have descended into the vagina as in inversions of the uterus, a ring is found, as a rule, in the fornix vaginæ, formed by the lips of the os uteri, embracing the pedicle of the tumor; or at least a semilunar fold is discovered before and behind the pedicle surrounding the latter. If now we seize the tumor with the hand or with a volsella and draw it with some force towards the introitus vaginæ, it will soon be perceived, if it is a case of inversion, how the above mentioned folds surrounding the pedicle disappear more and more, until finally the immediate, completely smoothed transition of the fornix vaginæ into the pedicle of the tumor is effected, and thus the diagnosis of inversion made certain." Werth* insists upon it that this sign is not absolutely peculiar to inversion, and cites a case occurring in his practice, of a submucous myoma attached to the posterior wall of the uterus just above the os. Here traction on the tumor, which had escaped into the vagina, permitted the posterior cervical wall to unroll up to complete disappearance of the posterior lip of the os uteri, and yet no inversion of the posterior segment of the wall, occupied by the tumor, was produced. So even when this phenomenon can be elicted, it is by no means demonstrative.

The information gained by the use of the sound should be invoked in cases of doubt. As a rule, the cavity will be found to be shortened to a greater or less degree in the same proportion as the dislocation is more or less marked.

The most thorough and satisfactory method of examination, and the one that will generally lead to positive results, is that of rectal exploration combined with abdominal palpation. For this purpose, ene or two fingers of one hand (preferably the left), are introduced into the rectum, the other hand feeling through the abdominal walls. By this method of bimanual palpation we can attain to the cup shaped depression, corresponding to the point of inversion, usually, from the rectum.

**Lehrbuch der Krankheiten der Weibbeh, Sex. Organ, 5te Auflage, p.* 148, loc-c.

It may be necessary to resort to the plan successfully adopted by Betschler according to Veit,* and draw the tumor down. At times, however, no depression can be detected, the edges of the opening into the funnel-like depression being in such close apposition as to escape recognition. We will, on the other hand, be impressed by the fact that the entire body of the uterus cannot be demonstrated between the palpating fingers; one horn may be missing, or the body will feel undersized. As a rule, we ought to expect to find the body larger than normal, as a uterus, the seat of a neoplasm, is generally in a hyperplastic condition. The previous history of the patient will hardly even give diagnostic elements of significance.

Before discussing the question of treatment it may be well to allude to an error which has been copied from one text-book to another, as if it were a well established fact. The error referred to is the assumption that when a partial inversion is produced by an intra-uterine growth, we may expect to find a pedunculated fibrous polypus as the efficient cause—the truth being, on the contrary, that in such a case the inversion is due to an interstitial submucous myoma, *as a rule*—a sarcomatous or carcinomatous growth as the cause of a partial inversion being a rare phenomenon. When, therefore, we are called upon to deal with a tumor presenting the appearance of a polypus, but closely attached to the uterine wall by a thick, soft and fleshy pedicle, a partial inversion being demonstrated or strongly suspected, it is safe to assume that it is, actually, an interstitial or submucous myoma that we have in hand, and our operative procedure must be regulated accordingly. Instead, therefore, of applying the écraseur, or making use of the scissors or Thomas' leviated scoop for the ablation of the neoplasm, as we might be tempted to do in obedience to the first impulse, it is more rational to resort to enucleation. If any doubt should arise as to our ability to nucleate the tumor, the suggestion of Werth† is worth following, to pass, in the first instance sutures through the pedicle, as in this way we guard

*Vide *Krank. de Weibl Geschb. Zweite aufe*, p. 346.
†*Loc. cit.*, p. 76.

against all contingencies, even in the event that finally the growth must be ablated by scissors or écraseur.

The mechanism of the production of an inversion by an intrauterine tumor is a question which has been much discussed. Scanzoni* brings to the study of this theme a finely philosophical spirit, and gives the following explanation: "Interstitial tumors, now and then," he says, "in the course of their development, cause fatty degeneration of the muscular fibres of the uterine wall enveloping them,—nay, even complete atrophy of the portion of the uterine parenchyma, in which they are situated. * * * But if the portion of the uterine wall inclosing the fibroid tumor become atrophic, or for any other reason less contractile than the remainder of the organ, and if the tumor already projects into the uterine cavity, in consequence of the contractions excited by its presence, the tumor is forced more and more deeply down towards the orificium internum, the relatively relaxed wall in which it is imbedded is dragged after it, and in this way is depressed."

A confirmation of his views Scanzoni finds in the circumstance that he never discovered, in long pedunculated fibrous, polypi depending in the uterine cavity or in the vagina, at the point of inversion of the tumor, the above described condition favorable to the origin of an inversion, but that point appeared perceptibly thickened, and provided with a rich muscular layer. Says Virchow:† "We scarcely ever find a thinning of the walls in rather large polypi. Even when quite large polypous myomata produce a dilatation, by which the uterus appears as it does in pregnancy, the wall is yet regularly thickened." Werth* believes that in view of the clinical facts, still farther auxiliary factors must be assumed, and moreover that one or even both of the factors mentioned by Scanzoni (atrophy of a portion of the uterine wall and uterine contractions) may be wanting, and in their place others can be effective. "In a comparative perusal of the histories," he observes, "a defective agreement exists in the clinical picture of the cases communicated, especially in so far as, in a part of them, the dislocation occurred, with the

Loc. cit., p. 144.

† *Die Krankhaften Geschwulste.* Bd. III. p. 166.

accompanament of intense pains, to be referred to uterine contractions, whilst, in other cases, the inversion was found with no preceding phenomena whatever to suggest its existence, nor to determine the point of time of its development.

With relative frequency intrauterine tumors lead to inversion in rather old individuals, near the monopause, or who have already attained to it. Under such circumstances it would be erroneous to ascribe to the organ, weak from age, the faculty of energetic contractions of expulsive effect; and it is also just these cases which pre-eminently distinguish themselves by the development of the dislocation without symptoms.

If we find, many times, also, in such cases the condition of the wall designated as hypertrophic, it yet remains questionable whether the tissue elements determining the hypertrophic condition were of a muscular nature, and therefore able to unfold motor effects. But since the age alone does not decide upon the motor faculties and the nutritive condition of the uterus, the circumstance is not precluded that the entire organ was in an abnormally relaxed condition, in many rather young individuals, who suffered inversion in consequence of the development of a tumor. And just this want of resistance to dislocating influences, extending to the entire organ, not merely a partial one limited to the seat of the tumor, must be present if the complete inversion is to be developed without the aid of uterine contractions.

A second indispensible condition is the broad opening of the lower segment of the organ. To pave the way for this opening, and to complete it, the force of pressure developed by the growing tumor, is alone sufficient under some circumstances. By the latter, the path is not only made free for the descending change of place of the segment of the wall originally situated highest, but especially the possibility of this change of place is effected by the fact that the uterine cavity enters now into broad communication with the vagina. The pressure in the latter, otherwise somewhat lower than the intra-abdominal, and, therefore, the intrauterine, holds good now also for the uterine cavity. In consequence of this, there can appear, according to the conditions, either a

depression of the uterine wall, immediately exposed to the pressure of the abdominal cavity, gradually developing and increasing to a higher and higher degree, or the inversion may suddenly originate, under the influence of a momentary considerable increase of the already prevailing difference of pressure by means of energetic impulses of abdominal pressure."

The explanation given by Scanzoni we believe to be the true one, for the majority of cases; but at the same time we must admit that the mechanism suggested by Werth must be invoked for the understanding of a more limited number.

ART. II.—**Clinical Lecture* on Rupia Syphilitica.** By ARCHER ATKINSON, M. D., late Professor of Practice in Baltimore Medical College; Ex-Professor Materia Medica and Dermatology; Member of Microscopic Society, etc., Baltimore, Md,

We have before us a patient who presented himself at my office in June, 1882, with a single sore on the left side of the prepuce, of the size of a split pea, with a slight discharge resembling the white of an egg. There was no appearance of pus to the eye. He felt no pain in the part; had no smarting either; nor were there swelling or other evidences of active inflammation. The sore appeared very trifling, and you would probably have said it was the result of rubbing a tender surface in hot weather, unless you had seen just such a sore before. This little sore had the appearance and feel of having been implanted on a bed of soft india-rubber—that peculiar feel which the experienced finger might recognize even in the dark. The sensation is one of slight hardness, but chiefly striking you as elastic. This feeling of elastic hardness especially points to the true constitutional nature of the sore.

A gentleman called on me some time since with just such a sore, only the prepuce was elongated by nature, and was difficult to slide back, owing to an inflamed, hardened spot, also on its left side. I examined the sore carefully, and gave a decided opinion that he had a true syphilitic chancre. He was a sensible man, and had heard that hardness was the

* Feb'y 12th, 1884. Reported by a Student of the College.

sign of constitutional infection. So he had persuaded himself that the hardness was caused by his burning the part with carbolic acid. In forty-five days, though, he had the characteristic roseola which we find appearing after the sixth week.

Let me tell you here that this very burning may mislead you. I have seen other sores have their margins, and the surface outside of them, much hardened from the action of nitrate of silver. Nitric acid does not produce this induration like lunar caustic, unless you have burnt a considerable surface around the sore, and then you have the hardness in the reproduced connective tissue. This is rather queer, as we are taught that nitrate of silver burns from its seizing moisture from the tissues by the affinity of the acid for water. If you once see the difference between the constitutional hardness and that caused by caustics, you will never forget it.

Now what was the nature of this sore that we have brought our patient here to-day for? The solution was a true chancre—the real syphilitic, the infecting chancre—formerly termed the Hunterian chancre. Some years ago the word chancre meant simply a venereal sore—not necessarily a hard or a soft chancrous sore; but now the term expresses the venereal sore from which the disease syphilis may be taken (of course not here including the secondary lesion). I mean the chancre must be the initial sore. The soft sore is now called chancroid, because it *resembles* the true chancre.

This sore like the chancre, often gives more trouble than does the true sore; for it poisons, gives off a good deal of pus, often spreads to an alarming extent, and we have no special way of telling whether a given sore will spread or not. We do know, however, that in the strong, the likelihood to spread is greatly less than in the weakly and badly-fed subject. It has a great way of becoming what is called phagedenic—that is, spreading to a great extent till there results more or less loss of tissue by gangrene of the skin around. We find, too, that this soft sore is *very apt* to be multiple—that is, we are apt to find two, three, or even a half dozen just such sores grouped about the prepuce and the glans—that they

are difficalt to heal up, and that they are the sores which give rise to buboes. The real *chancre* heals up far more readily and kindly than does its lesser satellite, the soft chancroid, and it has little or no tendency to the creation of buboes.

Here we have no signs of an old bubo. I wish we had the old sores here in the groin for our patient's sake, for he would have been in a better condition to-day. I knew, in his case, there would be no bubo, unless he so inflamed the sore by burning it, or by too much walking, so as to kindle up lymphatitis in the absorbent vessels, which inflammation would then probably be extended to the glands in the upper part of the left groin. Now note the difference as I trace to you the seat of the lymphatic glands in the groin. You have the one set beginning at the glans and running along the same side and the dorsum of the organ, giving hard, red cords, if inflamed, like painful threads, until they lead up to, and stop just where the pencil is resting; I mean at the upper part of the groin just above Poupart's ligament, which, you know, runs from the anterior superior spinous process of the rim of the ilium downwards and inwards to join the pubic bone, and especially to form the arch under which the femoral vessels run, and beneath which the inguinal glands are imbedded in a mass of fat and cellular tissue. Now this ligament divides, in our mind, very superficially the upper and the lower inguinal space—the portion above the line being where the upper lymphatic set of glands lie collected, the lymphatics forming these upper glands coming from the generative organs; while the lower set of glands communicate with the lymphatics coming from the anus and buttocks. This leads you to understand why a boil or a chancroid, or even a fissure, on the buttocks or about the anus gives you an enlarged gland in the groin, and why the boil on the right buttock should give you the gland on the right side. But mind you, gentlemen, it will be in the part of the space below the ligament of Poupart. Now a man, if he must have a bubo from a sore on the privates, will have the bubo on the same side with the sore; but it will be in the space above the ligament mentioned. This fact was

often referred to and insisted on by Ricord, of the Hopital du Midi, of Paris, and so little did he think it recognized by the profession and by students, that I have heard him allude to it time and again.

We see no marks of a bubo here. If he had first had an open festering, mattering soft chancre (or chancroid, as Clerc first called it in his cliniques, and afterwards in his little brochure on the difference between the so-called hard and soft chancres), he would likely have had the inflammation extend up into the glands of the groin, and form a hard, painful, hot and reddened mass during the first month or six weeks of the existence of the sore. If such had been the case, we would have opened the bubo, and *that would have been the finale of the matter.*

One point more: He will tell us how many sores he had in the beginning. He says he had but *one*; that it did not pain him, nor did it inflame the parts around; that he had no suppurating tumor in the groin. We will ask him if he had any tenderness, however slight, in the groin, and if so, in what direction of the inguinal space the tenderness was located. He puts his hand on the upper part of the space, and says there was a slight enlargement, with a little tenderness there as he walked, and that was about the third week of the existence of the little sore which he thought amounted to nothing. Note that he tells you that he had but *one* sore. This is *very* important. Record watched this point closely; and I have seen him inoculate the man with the hard chancre (true sypilitic sore) over and over again, and each time the effort proved abortive, except that he made a sore spot, which *quickly* healed up; but in every case where he inserted the pus into the arm of the man from his own soft chancre (chancroid), he gave a sore in the arm just like and of the same nature exactly as the soft sore from which the virus was taken; and in every case the healing was much more *tardy* than when the virus from the hard sore was used. If he inserted the virus from the soft sore in a dozen places in the same individual, he would have just as many *true chancroids* from the inoculation, the risk being not so much in producing the genuine disease as in causing the sores to take

on phagedenic inflammation, which would not be justifiable. Turenne had such a mania that for a while he got the consent of the Government to syphilize the entire French Army, but the authorities took a second thought, and stopped his career. Ricord insisted that the true chancre was always or nearly always a solitary or a single sore—small, hard, not running much matter, with an unmistakably elastic feel when pressed between the thumb and forefinger, and with a far greater tendency to heal than the soft sore; that it did not, except from accidental causes, produce bubo, but would in most cases give rise to some enlargement in the groin, which would remain perceptible for some months, but which was rather the evidence of chronic enlargement than of active inflammation.

We will now look to our patient. I will tell you what we did for him in point of medication. He had a true *single* chancre. There was very little to do for it; indeed, the thing is to keep from doing too much. The system has already become contaminated when the induration appears on the sore, and the hard sore is but the evidence of this systemic absorption. Besides the engorgement of the inguinal glands helps to confirm our diagnosis, just as after a couple of months the enlarged and tender glands behind and above the inner condyle of the humerus assists to assert its correctness. The harm is done. We may burn if we like, but burning will expose a larger surface to heal up. A year or so ago the plan was adopted of excising the hardened sore, but little could be accomplished in this way, except to amuse the patient, and leave an open sore.

The proper plan is to promote the healing of the sore as speedily as possible, by the application of calomel powder very lightly dusted on twice a day—which is no tell-tale like iodoform. Iodoform is an excellent application, but is likely to direct suspicion to the party using it—just as if a man could not use a drug without doing anything wrong; but so it is, like the travelled fox which lost his tail. Now, we are told we can disguise the smell of the drug by adding oil of peppermint, by balsam-peru, by oil of citronella; and a firm in St. Louis sent me a sample of "odorless iodoform" some

time ago. It reminded me of the so-called odorless excavating machines you see on the streets, or of some disinfectants which outsmell the smell you wish to destroy. You may do something towards lessening the smell of the iodoform by adding two parts of tannic acid and a few drops of oil of peppermint to it—though I prefer the oil of white rose. None of these agents permanently remove the smell. A gentleman told me some time since that he began to use iodoform ointment for an eczema which had troubled him for twenty years, but had to stop it because of its offensive odor, though he used it only at night. Some one in Philadelphia advised him to have finely-ground toasted coffee rubbed up in the ointment. It was rather gritty, but it answered better than any other agent he had tried. The fluid extract of coffee he found would not answer.

Well, we directed iodoform to be sprinkled lightly over our patient's sore. He rather made light of our precaution, as there was no pain, no swelling, and no mattery discharge, and insisted that it did not proceed from impure coitus. Like most old gentlemen, he fancied he had made what some, in modern parlance, term a "mash," and that he was the only fortunate man to whom the widow granted her gentle favors. I cautioned him not to touch his wife, but he replied there was no danger, as his sore amounted to nothing.

You see now by the extensive cutaneous eruption what it did amount to even then. For about six weeks I did not see him again, when the sore had healed, leaving only the very *slight elastic* feel which always follows in the wake of the truly syphilitic sore. In three months he came back greatly troubled with the smaller pustular syphilide over his face, shoulders, and arms. He was now willing to begin constitutional treatment. From his description I am sure he had passed through the roseola period while basking in the sunshine of supposed security. He was put at once on bichloride of mercury in a tincture made of cinchona, quinia, and sarsaparilla, with burdock, which tincture he took in drachm doses, with $\frac{1}{12}$th grain of the bichloride in each dose.

This he kept up for two weeks, when he returned to say that his wife had elevated spots on her arms, shoulders, forehead, and hips. I went to see her, and found her pretty well broken out with syphilitic tubercles, soft, rounded, of a

tan-ham color. I gave her at once bichloride of mercury in $\frac{1}{12}$th grain doses, *ter die*, in the same vegetable tincture. Messrs. Coleman & Rogers make it after a formula I gave them. Any Doctor can get it who cares to ask for the formula. I like it because it is a good tonic, and forms a ready vehicle for the truly active remedy; besides, patients think if they do not take some form of sarsaparilla, they are not being treated at all.

The wife kept this up for a week, when I was sent for to see her with "sore eyes." I found she had syphilitic iritis in both eyes, and for two weeks I had great difficulty to prevent her losing her sight. By the free use of a four-grain solution of atropia dropped daily into the eyes, and raising the bichloride to $\frac{1}{8}$th grain dose three times a day, by blistering both temples, and dressing the raw surfaces with an ointment of half belladonna and half mercurial ointment, I managed to get the patient so completely under the mercurial influences as to break up the iritis without purging her or causing ptyalism. This, you can effect by the careful use of the corrosive chloride and, indeed, you can push it further with less risk to the patient, and greater surety of good in the truly syphilitic, uncomplicated with scrofula, than you can any other effective preparation of mercury with which I am acquainted. If you combine mercury with opium you salivate much sooner than without it. If your mercury should run off by the bowels, simply stop it for two or three days, to resume its use when the consistence of the bowels again becomes good. Always see that, while taking mercury continuously, your patient has one stool a day; if not, give him an occasional dose of Seidlitz powder.

Our patient here to-day has been very irregular in his treatment. For a month he would take medicine, and then for over two months he would take nothing. He had a good constitution, which enabled him to resist the disease to some extent; but the old Dragon will get the better of those who are not forever vigilant.

About two months since—about the sixteenth month of the disease—he had several bullous collections on the skin of the left leg, just half way between the instep and the knee. They began as white bladders, but soon became turbid and yellowish and thick, and, as you see now, the incrustations are arranged one above the other like an old, rough oyster-shell, layer upon layer, until the thickness must be half an inch in the centre, and shelving down to a thin bevelled crust at the edges. He tells us that the phlyctænæ or bullæ

(blebs of liquid) came out in a couple of days, each bladder of serum appearing in succession. As each dried it burst, and the thick matter formed the crust; each one bursting and not yielding matter enough to run off, it would harden into the crust you see, while matter mixed with brown blood oozes from beneath. This scalds the part, and in turn some of it hardens to give the edges a jagged look with rotten edges. This is one form of rupia.

Bateman used to say rupia was phlyctenoid; Devergie, of Hopital St. Louis, in Paris (the great skin hospital then of the world), called it "a cutaneous disease, with vesicular formation;" while Biett makes it a truly "bullous disease." Devergie goes on to state that the vesicular contents may become encrusted in twenty-four to thirty-six hours into a scab, and that we may call it rupia at the end of that time. In its commencement, you may find from two to a half dozen vesicles, larger or smaller in size; at first small, and if close together, gradually spreading to touch in their thin bladder like outlines, and to become confounded and blended together so as to form one large phlyctenoid collection. These vesicles fill up in a very short time.

Rupia is a *chronic* affection, and in thirty-four cases noticed we find only three of them dating less than one month, while twenty of them lasted from one to twelve months, and eleven lasted over one year. Winter and Summer are its seasons of preference, while but fourteen cases appeared during the Spring and Fall. The legs are the points of choice for the trouble; next comes the thigh, the face, chest and forearm in thirteen cases; then the forehead, the hands and back in seven cases. In this enumeration, the genitals were not once affected. Syphilitic complications, mind you, were noticed in eighteen cases out of forty-five, taking all sizes, ages, and conditions. Yet some authors claim that rupia is always syphilitic. The nose is a frequent seat of syphilitic rupia, attacking the alæ and the bridge.

In old syphilitic cases we may find deep cavities eaten out by the rodent ravages of the disease. Indeed, it has been remarked by an excellent physician that in very many cases of supposed "noli me-tangere" and of so-called epithelioma of the nose, it is at least a good plan to administer twenty-

grain doses of iodide of potassium before giving a decided opinion as to the malignancy of the case. I have seen one case clear up after a few weeks' administration of the salt in full doses with the syrup of the iodide of iron, at the White Sulphur Springs, in Greenbrier county, W. Va. I saw one such case greatly improve on Donovan's solution (which is a solution of the iodide of arsenic and mercury), in ten-drop doses, given in the compound tincture of gentian. We cannot help having our suspicions, though it is not always best to intimate them.

Rupia is a disease of debility; at least, I have seen it only in the feeble, or very poor from insufficient food, and in persons as the result of early debauch or venereal taint. Such cases all do best on full, wholesome diet, on tonic tinctures, and on iron in some form; and I prefer the syrup of the iodide of iron with iodide of potash, with which it was completely compatible.

This case you see has shed its scab or crust in some parts, but it re-forms as the thick matter collects on the part. You notice its roughness, its oozing of matter unlike pure laudable pus, but mixed with blood and the *debris* matter of the decomposed matter beneath the crust. He says he has a succession of these crusts; that the part nearly heals up, and then the acrid matter scalds a fresh surface, or a new crop of vesicles appear to be followed by the running together and formation of fresh scabs. Beneath this scab the surface is very raw, and bathed in the acrid matter.

You see, then, that cleanliness is an important element in treating such cases, and this you can promote by adding a little carbolic acid to the tepid water in which it is bathed. You will seldom see a *rupia simplex* appearing on the face, while the syphilitic form often selects that site. The crust in the syphilitic form is most apt to peel off in the centre, and to spread by its margin. You cannot see it yet in this case, but in other cases where the rupia ulcerations have repeatedly formed, you will see white scars like those left from a burn, following the large ulcers and pustulations, showing pigment granules of the skin to have been destroyed.

If the crusts have collected in a conical form, they give the name of "cockle shell" to the eruption. The layers of

rupia may be of various shapes—conical, as just stated, circular and elongated—or you may very rarely find it scattered about like patches of psoriasis guttatta, where the matter seemed to have dropped down at intervals of a few inches, and to have dried up into isolated crusts, only you will not find the silvery scales in the rupial sore as in the psoriasis. In rupia simplex the crusts are small; in the rupia prominens they are very elevated, as the name implies, and if attended by extensive ulceration and by much acrid discharge, we call it caustic rupia, or rupia escharotica

All forms of the disease evince a depraved condition of the body; of the blood indeed, whether from syphilitic inroads or from bad hygienic influences. Dr. Melchoir Robert, Chief of Clinics for Ricord, says about thus in his description of the different syphilides: "The vesicular syphilides are the rarest of all those we meet, and when we so find them it is under the form of herpes, eczema, of pemphigus, and of rupia." He then makes it a rare form of syphilitic eruption, and goes on to add, in point of treatment, "Syphilitic rupia affects nearly always feeble persons, and should be treated by uniting an alterative tonic with the specific."

We see, then, what is the indication in cases of syphilitic rupia, and indeed in most forms of constitutional syphilis in its advanced form, especially in such cases as we find in hospitals and dispensaries—as a rule, in charity hospitals. Such patients have too often had their systems enfeebled by large doses of mercury and the iodide of potash, while the same remedies should have been given in suitable doses *with* some good tonic tincture or with cod-liver oil and iron. I have seen such cases actually gain flesh and strength under the mercurial treatment, but they require food along with the hydrargyrum. Clerc was fond of the Liqueur du Van Swieten, which was about this: Take sixteen grains of bichloride of mercury, add alcohol enough to dissolve it, then add water enough to make 900 grammes, or say sixteen grains to the gramme; we have 16x30, as you see on the black-board, 480 grains to the ounce; so that the 900 grammes will give us (by multiplying 30x900)=2,700 grains, which, divided by 480 grains, give the number 56¼ ounces. Now add sugar

enough to make 100 grammes, or say $3\frac{1}{3}$ ounces, and you have the famous Van Swieten's liquid. It can be given longer with less irritation to the stomach and bowels than most mercurials. The dose is large, being one tablespoonful, making it troublesome to carry in the pocket, which for some patients is a great desideratum. In enfeebled cases, you may add tincture of the chloride of iron, five to ten drops to each dose, and you may even give it in quassia tea, which gives no dark color, with the iron. We may get additional good effect from 5 to 10 drops of the dilute muriatic acid, taking care to give it in a wine-glass of water or some bitter infusion, so as to dilute the acid well, and prevent its action on the teeth.

Our patient tells us he had never had any scaly eruption about the hands, feet, or back of neck. I asked him this that your attention might be directed to the fact that the scaly or squamous syphilides are the most obstinate to cure, and that they will not stay cured either. The pustular syphilides denote debility, while the scaly represent obstinacy against our efforts at cure, and this may apply to scaly eruptions, whether specific or not. When you think you have cured them up, they will crop out again after a few months or a year. When you have had a syphilitic patient for more than a year, always think to look for scales on the feet or hands. We don't find them here, but unless he perseveres *very faithfully* in his treatment, he will be apt to have them.

In cases like this man, it is well to alternate the internal and external treatment—that is, give by the mouth a couple of weeks and then change to the plan of inunction; or give the bichloride for two to four weeks, then change to the protiodide for the same time; then take to the ointment. In this way you keep up the gentle mercurial influence continually. I like to stop a day or so, no matter what plan I resort to.

You can use the common mercurial ointment, and in children this plan is preferable to all others. In winter you can soften the ointment with a little [cosmoline or] vaseline, or use the ten per cent. oleate if you prefer. Begin by rubbing one drachm of the blue ointment in the winter season, when

baths are not taken so frequently and when the skin is less tender, into the right groin for the first three nights; now change to the other groin for the next three nights. Then take the inner side of the thigh—first the right and then the left—for three nights; then rub over the right side of the abdomen; next over the left side, and so on over the chest. It is not a good plan to rub under the arms, which are sensitive to the irritation of the mercury.

You may resort to the injection of the solution of the corrosive chloride, but you must acquire skill and confidence before using it in this way. Twice a week will be often enough in the hypodermic form. I find great objection on the part of patients to this plan of treatment. They say they had rather take the medicine by the mouth than have it thrust into their muscles, with the possibility of forming abscesses. Very much depends on the skill of the operator as to whether an abscess is formed or not. If the skin is simply separated from the parts beneath, even Magendie's solution will do that; but if your keen-pointed, clean needle be thrust well down into the larger muscle, you need have no abscess. Ammonia has been injected without the production of abscesses; though the worst sores I ever saw were produced not long ago in a poor woman's arms and thighs by repeated injections of quinine to bring down the temperature of puerperal fever.

I once saw a lady badly salivated from rubbing mercurial ointment on the abdomen of her daughter. She got the full effect of the remedy instead of the patient. So I tell the patient to rub the ointment into the skin with a piece of chamois leather. He gets the full effect then, and does not salivate himself from the absorption through his hands. When the skin is very susceptible to the mercurial erythema from repeated rubbing, you can get the effect by spreading the ointment on a piece of chamois skin, or quilted canton flannel 6x8 inches, and wearing the skin, kept on by means of a belt or a bit of tape. He can change this little apron from one side to the other of the abdomen, the chest, and can wear it inside the thighs, or in front of them if he likes. Different persons are variously susceptible to

salivation by this method of inunction. I know one man who was profusely salivated by very small inunctions (half a drachm daily) of mercurial ointment; and I have noticed brown-skin white persons are especially liable to this accident.

We will return to our rupia case again. We have not only used in this case the corrosive bichloride, but have alternated it with the protiodide of mercury; then we would make him rub until he complained of messing himself up with the ointment. Every one is alike in this. It is a vile mode of treatment, except for children, when you can make a belt and smear daily with the ointment. You are to remember, too, that extremes meet—that is, that little children and old people are both hard to salivate. You may color the mercurial ointment if you like; a little cochineal gives it a maroon, and a little turmuric changes it to a yellow-green; still with vaseline and proper coloring matter you can get up an ointment which is not too stiff, nor too irritating, nor so repulsive in color, and which the patient will wear as long as you tell him it will do him good.

If our patient will persevere in his treatment, he will do well, but if he neglects himself, as he has been doing, he need have little hope of a cure. The rupia is but one of the late manifestations of the constitutional trouble, and needs no special treatment for itself, but the specific treatment must be kept up. He is now in the latter part of the secondary and at the very beginning of the tertiary manifestations, which we find at variable periods; and this is the period of the disease where iodine preparations come in so well—such as the iodide of potassium, of sodium, and the red or biniodide of mercury. Strange to state, this patient has had very few of the nocturnal pains peculiar to this stage of the disease; nor has he any signs of gummy tumors on his leg, or on his neck, forehead, or shoulders.

You will notice in your clinics here that the early syphilitic eruptions are shallow—that is, they confine themselves to the surface—while as they get on to become chronic, they get deeper. The erythema precedes the papule; then comes the smaller syphilitic pustule, then the tubercle, and the large pustular syphilide. These large pustules may leave ugly scars on the back and limbs; then we may have the rupia which is half pustular, and may be deep or shallow.

Now we will give our patient the mixed treatment, since

he is on the fence between the secondary and the tertiary periods. We will prescribe the compound tincture of bark, ℥j, in which he will take, three times a day, the $\frac{1}{16}$th of a grain of the red (double) iodide of mercury, and ten grains of the iodide of potassium. We need not dress the sore—only sprinkle a little dusting of iodoform over it now and then, and let the crust dry up and fall off. Too much bandaging will do harm—will keep the part too hot, and is apt to catch the matter, and cause greater cracking than before.

It is well you have had a chance to see such a case, for you may practice years in the country without seeing one. It is well, too, for you to know the obstinancy of these cases, and that debility generally attends on them.

At another time I hope to bring before you a typical case of vitiligo, or the piebald disease of the skin, where the natural pigment has become destroyed, and the resulting white blotches are called piebald marks, as we see them in circus ponies and in half albinoes.

ART. III.—**Classified Statement of Cases of Diseases and Deaths Occurring in the Medical Service of Joseph Jones, M. D., 1869-1885, in the Charity Hospital of New Orleans, La.**

I have served in the Charity Hospital of New Orleans from January 1st, 1869, to April 1st, 1870, and since that time, to April 1st, 1885, six months of each year—from the 1st of October to the 1st of April. I have during this period, extending over seventeen years, kept a careful record of the names, ages and nativity of patients, diagnosis, prognosis, and the final result of the cases treated by me in the wards of the Hospital. During this period, the total number of cases under my immediate care was 5,963, of which 644, or a little more than ten per cent., terminated fatally.

The following consolidated record will, we hope, prove of permanent value for comparison, and for the illustration of the nature and mortality of the prevalent diseases of the Delta of the Mississippi :

GENERAL DISEASES.

Malarial, Paroxysmal, Endemic, Non-Contagious Fevers.

	CASES.	DEATHS.
Intermittent Fever, including Quotidian, Tertian, and Quartan	2,192	5
Remittent Malarial Fever	239	6
Pernicious or Congestive-Malarial Fever, including the Comatose, Algid, and other varieties (a large proportion of the cases were brought into the Hospital in a moribund condition)	77	51
Chronic Malarial Poisoning (Malarial Toxæmia, Cachexia), with various complications, as Enlarged Liver and Spleen, Contracted Liver, Anæmia, Anasarca	188	14
Malarial Hæmaturia	12	6
Total Malarial, Endemic, Non-Contagious Fevers..	2,708	82

Contagious and Infectious Fevers and Diseases.

	CASES.	DEATHS.
Dengue	15	
Yellow Fever	76	35
Typhoid Fever	16	3
Measles	10	2
Scarlatina	4	1
Diphtheria	2	
Mumps	2	
Small-Pox	18	1
Asiatic Cholera	2	2
Total Contagious and Infectious Fevers and Diseases	145	44
Phthisis Pulmonals	386	117
Elephantiasis Græcorum (Oriental Leprosy)	5	3
Elephantiasis Arabum	3	
Yaws Arican	1	
Scrofula	14	3
Scurvy	7	
Purpura Hæmorrhagica	8	
Total	38	6
Medullary Cancer	2	
Epithelial Cancer	1	
Osteoid Cancer	2	2
Schirrhus Cancer	2	1
Cancer of the Uterus	1	

	CASES.	DEATHS.
Cancer of the Stomach	1	1
Cancer of the Pylorus and Pancreas	1	1
Cancer of the Liver	2	2
Cancer of the Testicle and Mesenteric Glands	1	1
Cancer of the Rectum	1	
Cancer of the Tongue	1	1
Cancer of the Penis	1	
Total	16	9
Erysipelas	19	2
Acute Articular Rheumatism	145	3
Chronic Articular Rheumatism	148	2
Muscular Rheumatism	17	
Gonorrhœal Rheumatism	6	
Syphilitic Rheumatism	28	
Gout (chronic)	1	
Primary Syphilis	34	
Secondary Syphilis	117	3
Total	515	10
Grand total General Diseases, including all the forms of Malarial and other Fevers, Phthisis, and other Constitutional Diseases	3,808	268

It is evident, from the preceding figures, that while the malarial (paroxysmal) fevers numbered 2,708, out of a total of 3,808, or about 71 per cent. of all general diseases, the mortality occasioned by malarial fevers was only 82 out of 268 deaths from all causes.

The mortality occasioned by the various forms of malarial fever was only 30 per cent. of the mortality occasioned by all general diseases, including the former.

We will now examine the numerical relations of the local diseases treated by the author in the Charity Hospital during the periods specified:

LOCAL DISEASES.

Diseases of the Nervous System.

	CASES.	DEATHS.
Meningitis	7	2
Cerebritis	2	2
Softening of the Brain	7	4
Abscess of Brain	2	2
Syphilitic Tumor of Brain	1	1

	CASES.	DEATHS.
Apoplexy (cerebral hæmorrhage)	15	12
Cerebro Spinal Sclerosis	1	1
Spinal Meningitis	9	2
Myelitis	1	1
Atrophy of Spinal Cord	2	1
Sclerosis of Spinal Cord	6	
Hæmiplegia	55	13
Paraplegia	33	4
Paralysis caused by Lead	8	1
Paralysis Agitans	5	
Epilepsy	38	2
Loco-motor Ataxia	5	
Sciatica	7	
Facial Neuralgia	26	
Chorea	1	
Dementia	12	
Dementia and General Paralysis	4	2
Insanity	5	
Tetanus	1	
Sunstroke (Thermic Disease)	3	1
Alcoholism (Delirium Tremens)	153	7
Total Diseases of the Nervous System	379	58

Diseases of the Circulatory System.

	CASES.	DEATHS.
Heart: Valve Disease: Mitral	24	8
" " " Tricuspid	1	
Aortic, Pulmonary, and Tricuspid valves	8	3
Fibrous Condition of Heart	1	1
Hypertrophy and Dilatation of Heart	1	
Hypertrophy, Dilatation and Valvular Disease	20	10
Fatty Degeneration	4	3
Palpitation and Irregular Action	25	
Peri-Carditis	1	
Aneurism of Ascending Aorta	10	2
Fatty Calcareous Degen. of Heart and Arteries	1	1
Aneurism of Arch of Aorta	4	2
Aneurism of Carotid	1	
Aneurism of Descending Aorta	1	
Aneurism of Abdominal Aorta	4	1
Valvular Disease of Heart and Aneurism	1	1
Total Diseases of Heart and Blood-Vessels	107	32

Diseases of the Absorbent System.

	CASES.	DEATHS.
Non-Syphilitic Bubo	1	
Scrofulous Disease of Glands	1	
Disease of Renal Capsules (Addison's Disease)	1	1
Total Diseases of Absorbent System	3	1

Diseases of the Respiratory System.

	CASES.	DEATHS.
Bronchitis	146	3
Vesicular Emphysema	1	
Asthma	44	3
Gangrene of Lungs	1	1
Pneumonia	152	32
Pneumonia (double)	28	17
Pleuro Pneumonia	16	6
Pleuro-Pneumonia (double) Supervening on Malarial Fever	4	4
Pleuro-Pneumonia Supervening on Phthisis	2	2
Abscess of Lungs	2	1
Laryngitis (acute)	6	2
Pleuritis	41	3
Hydrothorax	6	1
Pneumo Thorax	2	1
Hydro-Pneumo-Thorax	3	1
Total Diseases of Respiratory System	454	77

Diseases of the Alimentary Canal.

	CASES.	DEATHS.
Inflammation of Fauces and Palate	1	
Ptyalism	1	
Tonsillitis	6	
Pharyngitis	3	
Trachitis	4	
Dyspepsia	4	
Gastritis	10	
Gastralgia	1	
Gastro-Enteritis and Jaundice	2	
Gastro-Enteritis	5	
Cholera Morbus	10	
Enteritis	6	
Dysentery (acute)	107	16
Dysentery (chronic)	87	42
Diarrhœa (acute)	154	7
Diarrhœa (chronic)	116	23

	CASES.	DEATHS.
Dysentery and Diarrhœa (chronic)	131	30
Constipation	5	
Hernia	5	
Obstruction of Bowels	2	2
Hæmorrhoids	8	
Fistula in Ano	2	
Prolapsus of Anus	1	
Abscess of Rectum	1	
Cancer of Rectum	1	
Peritonitis	1	
Total Diseases of the Alimentary Canal	674	120

It will be observed that in this class of diseases, acute and chronic dysentery and diarrhœa occasioned 595 cases, with 118 deaths, the mortality being relatively greater in the chronic than in the acute forms of these diseases. Many of these cases were brought in wretched condition from the swamps along the railroads, and from the rice-fields above and below New Orleans, on the banks of the Mississippi and its tributaries, or were complicated by the action of the malarial poison.

Diseases of the Liver.

	CASES.	DEATHS.
Hepatitis	24	6
Hepititis and Abscess of Liver	12	7
Cirrhosis of Liver, with Ascites and Anasarca of Lower Extremities	30	20
Jaundice	10	
Fatty Degeneration of Liver	3	
Amyloid Degeneration of Liver	1	
Hydatids of Liver	1	1
Tuberculosis of Liver	1	1
Obstruction of Common Bile Duct and Jaundice,	1	1
Total Diseases of Liver	83	36

Diseases of the Spleen.

	CASES.	DEATHS.
Splenitis	2	
Hypertrophy of Spleen	1	
Leucocythæmia	1	1
Total Diseases of Spleen	4	1

The following facts should be noted with reference to the preceding classification of the diseases of the liver and spleen.

The cases recorded as jaundice did not express the number of cases presenting this symptom, for almost every case of yellow fever, and a large number of the various forms of malarial fever, as well as some cases of hepatitis, cirrhosis and pneumonia were jaundiced. Every case of prolonged malarial fever presented more or less hepatic derangement and enlargement of the spleen., but the said derangements were included under the head of the original malarious diseases.

Diseases of the Kidneys.

	CASES.	DEATHS.
Bright's Disease of the Kidney	78	24
Acute Nephritis	2	1
Diabetes Mellitus	3	1
Diabetes Insipidus	2	
Renal Calculus	1	
Total Diseases of the Kidneys	86	26

Diseases of the Bladder and Male Organs of Generation.

	CASES.	DEATHS.
Cystitis	6	
Enlarged Prostate	1	
Stricture	9	
Urinary Fistula	1	
Vesico-Rectal Fistula	1	
Gonorrhœa	25	
Hæmorrhage from Urethra	1	
Varicocele	4	
Cancer of the Penis	1	
Phymosis	3	
Hydrocele	6	
Orchitis	10	
Syphilitic Enlargement and Induration of Testicle,	2	
Total Diseases of Bladder and Male Organs of Generation	70	

Diseases of Female Organs of Generation.

	CASES.	DEATHS.
Gonorrhœa	5	
Prolapsus Uteri	2	

	CASES.	DEATHS.
Amenorrhœa	1	
Myalitis	3	
Abortion	3	
Vesico-Vaginal Fistula	1	
Recto-Vaginal Fistula	2	
Fibrous Tumor of Uterus	2	1
Cancer of Uterus	1	
Total Diseases of Female Organs of Generation	20	1

Diseases of the Organs of Locomotion.

	CASES.	DEATHS.
Caries and Necrosis of Bones	6	
Synovitis	4	
Caries of Spine with Curvature	2	
Soas and Lumbar Abscesses	3	1
Total Diseases of Organs of Locomotion	15	1

Diseases of the Cutaneous System.

	CASES.	DEATHS.
Urticaria	2	
Psoriasis	5	
Pemphigus	1	
Scabies	5	
Eczema	2	
Total Diseases of Cutaneous System	15	

Diseases of the Eye, Nose, and Ear.

	CASES.	DEATHS.
Conjunctivitis	1	
Purulent Ophthalmia	1	
Gonorrhœal Ophthalmia	2	
Scrofulous Ophthalmia	1	
Opacity of Cornea	3	
Syphilitic Iritis	3	
Scrofulous Iritis	2	
Cataracts	4	
Blindness	6	
Ozœna	1	
Otorrhœa	1	
Total Diseases of the Eye, Nose, and Ear	25	

Injuries, Ulcers, and Abscesses.

	CASES.	DEATHS.
Burns and Scalds	6	
Ulcers	27	1

	CASES.	DEATHS.
Amputations of Lower Extremities for Ulcers	3	1
Gangrene of both Feet (result of exposure to cold during night in Louisiana Swamp); Amputation of both Feet	1	
Concussion of Brain	6	3
Centusion of Head	1	
Centusion of Back	5	
Centusion of Abdomen	4	
Fractures	5	
Fracture of Femur of Old Age	1	1
Incised Wounds	6	
Dislocations	2	
Gun-Shot Wounds	4	
Abscess of Thigh, Ear, Throat, and Parotid Gland,	21	
Abscess of Parotid Gland and Pyæmia	1	1
Abscess of Rectum and Pyæmia	1	1
Cancrum Oris	1	
Total Injuries, Ulcers and Abscesses	95	8

Poisons.

	CASES.	DEATHS.
Lead Poisoning (Colica Pictonum)	9	1
Opium Habit	7	
Poisoning by Carbonic Acid and Carbonic Oxide Gases	1	1
Opium Poisoning	1	
Total Poisons	18	2

Conditions Not Necessarily Associated with Local or General Diseases.

	CASES.	DEATHS.
Parturition	16	1
Hypochondriasis	8	
Old Age and Senile Debility (many of the fatal cases attended with ossification and degeneration of blood-vessels, and failure of the heart and liver)	61	13
Total Conditions not Necessarily Associated with Local or General Diseases	85	14

Parasites.

	CASES.	DEATHS.
Tænia Solium (Tape-Worm)	9	
Total Parasites	9	

The mode in which we have grouped the different diseases is not free from certain objections. Thus we have classed alcoholism (*delirium tremens* and *mania â potu*) under the head of nervous diseases, whilst the effects of alcohol might with almost equal propriety be classed under the head of poisons. As the habitual use and abuse of alcoholic stimulants leads to fatty degeneration, hepatic derangements, cirrhosis of the liver and kidneys, exhausted nervous and intellectual actions, and other abnormal conditions, it is evident that alcoholism, delirium tremens and mania â potu might also with equal propriety be classed with general diseases.

Nevertheless as the most prominent symptom caused by the excessive use of alcohol, in patients transferred from the streets and crowded habitations of the poor, to the wards of the Hospital, are referable to the nervous system, such as wild delirium, sleeplessness, muscular and nervous agitation, it is evident that for all practical purposes those suffering from the effects of alcohol may be classed as in the preceding consolidated statements.

The preceding facts are significant, showing that alcohol does not destroy its victims, in most cases, suddenly, as in the dead sleep of profound intoxication, or in the wild, maniacal ravings of delirium tremens. By slow and measured steps, in most cases, by inducing cirrhosis of the liver, Bright's disease of the kidneys, anasarca, ascites, rheumatic gout, defective vision, fatty degeneration of heart, arteries and muscular system, and various derangements of the nervous system, which finally end in paralysis, imbecility, and insanity, alcohol invites its victims in irremediable and everlasting ruin.

Without doubt *alcohol* occasions a vast amount of disease over the face of this mighty Republic, and carries death, degradation and shame into thousands of happy homes. Alcohol is at the bottom of a large proportion of the crimes committed in the United States. Alcohol dethrones reason and poisons the fountains of sentiment and morals, and is even more destructive upon the moral and intellectual nature than upon the physical organism of man.

We must not suppose that the effects of alcohol are dis-

cernible only in the drivelling, idiotic drunkard, and the physically and morally rotten and abandoned wretches that crowd our bar-rooms, jails and brothels, but they are seen on every hand—in the dropsical, paralyzed, demented inmates of our hospitals and alms-houses, and in those suffering with various diseases of the kidney and liver, in high life as well as in low places. The constitution of the wealthy, or successful in any walk of life, whether professional or mercantile, may be as slowly and as effectually undermined by the habitual use and abuse of alcoholic stimulants as that of the day-laborer, working in the sewers of our streets or in the bogs of our swamps.

The paralysis produced by the prolonged action of *lead* upon the nervous system might be classed with nervous diseases; whilst the acute form of *colica pictonum* would find a place under the head of poisons.

RECAPITULATION.

	CASES.	DEATHS.
General Diseases	3,808	268
Diseases of the Nervous System	374	58
" " Heart and Blood-Vessels	107	32
" " Absorbent System	3	1
" " Respiratory System	454	77
" " Alimentary Canal	674	120
" " Liver	83	36
" " Spleen	4	1
" " Kidneys	86	26
" " Bladder: Male Organs	70	
Female Organs, Generative	20	1
Diseases of Organs of Locomotion	15	1
" " Cutaneous System	15	
" " Eyes, Nose and Ear	25	
Injuries, Ulcers and Wounds	95	8
Poisons	18	2
Conditions not Necessarily Associated with Local or General Diseases	85	14
Parasites	9	
Grand total	5,955	655

The Mortality in the entire number of cases treated was 10.8 per cent.

If a comparison be instituted between the rate of mortality in these cases under the immediate care of the author and the general statistics of the Charity Hospital, we obtain the following data, which he has consolidated at the expense of much time and labor:

During eighteen years preceding the Civil War (1842–1861), the total admissions into the Charity Hospital of New Orleans was 207,356; total deaths, 29,614; per cent. of deaths, 14.2.

During sixteen years following the Civil War (1864–1881), total admissions, 96,857; total deaths, 14,104; per cent., 14.5.

Total admissions during thirty-four years, 304,213; total deaths, 43,718; per cent. of deaths in the Charity Hospital of New Orleans during the thirty-four years specified, 14.3.

The greater proportion of the cases of fever, and of all other diseases treated by the author in the Charity Hospital during the period specified (1869–1885), were natives of foreign countries and of surrounding States. Many had resided here a short time, not exceeding one year in the United States, whilst many were brought directly to the wards of the Hospital from the swamps and rice-fields of the Delta of the Mississippi River.

Upon a careful examination, classification and consolidation of the statistics of the Charity Hospital of New Orleans, during the period of forty years—1836–1876—we find that 310,659 patients were admitted; and of this number, 248,011 were foreigners, 55,403 natives of the United States, outside of Louisiana, and only 11,761 were natives of Louisiana.

During the entire period of the Hospital service of the author, similar relations with reference to nativity existed amongst the patients under his care and treatment. During the term of service extending from October 1st, 1874, and April 1st, 1885, of a grand total of 547 cases treated by the author in the Charity Hospital, only 42 were natives of Louisiana, and of these only 18 were natives of New Orleans, the remaining 24 having been born in the various parishes of Louisiana.

Of the 63 deaths occurring during this period, only two were natives of New Orleans, and the cause of death was the same in both—namely, *phthisis pulmonalis*. Among the 24 natives of the other parishes of Louisiana, four deaths have

occurred by the following causes: Chronic Bright's disease, chronic dysentery, pernicious malarial fever, malarial toxæmia, or cachexia of long standing, with enlarged spleen, anæmia and general anasarca. The natives of Louisiana constituted only 7.6 per cent. of all the cases treated, and the mortality 9.2 per cent. of the deaths from all causes.

156 *Washington St.*

ART. IV.—**Genital Irritation as a Cause of Reflex Nervous Phenomena.** By LEWIS A. SAYRE, M. D., Professor of Orthopædic Surgery, Bellevue Hospital Medical College, etc., New York, N. Y.

Although I have so many times drawn the attention of the profession to the subject of reflex nervous difficulties, from genital irritation, it still seems to me to be overlooked by the majority of practitioners; for scarcely a week passes in which one or more cases do not present themselves at my office. I, therefore, feel justified in calling the attention of the profession once more to this important subject.

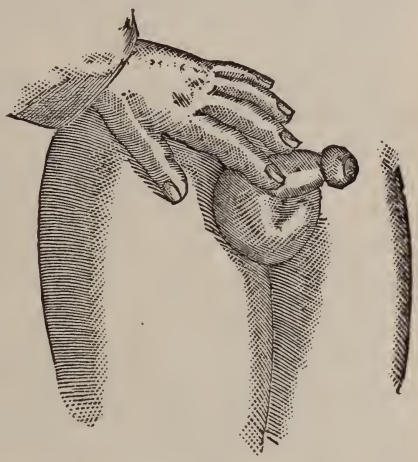
The following cases are very illustrative of the remarks just made:

CASE I.—*Jno. Francis Bourke, aged 6 years, son of Dr. Bourke, 144 W. Twelfth street, New York.*

Parents both healthy; one other boy, also healthy. The boy (Jno. F.) has always been healthy, but when he was three years old they noticed a peculiarity in his gait when running across the floor or in the street, and he would fall without any apparent cause. His appetite has always been good; bowels regular, and sleeps well. His parents also noticed that he was in the habit of handling his penis, and suspecting the nurse of getting him into the habit, they dismissed her. When he would make his water, the prepuce in front of the glans would fill out with water, and then burst out in a spray. About the 1st of July, 1885, the parents noticed that he seemed to be getting quite lame, but could not account for it. This continued for over two weeks. The father then fearing hip-disease, or disease of the spine, brought him to me.

On examination I could find no disease of any joint or

bone in the body, although he had a peculiar limping, jerking manner of walking, his legs frequently crossing each other in a spasm. On examination of the penis, the prepuce was found to be firmly adherent to the glans, the urethral orifice presenting a red, pouting appearance. On drawing the prepuce backwards, it was found firmly adherent to the glans within an eighth-of-an-inch of the urethral orifice, the tegumentary tissue of the prepuce, when drawn backwards, forming a constriction back of the glans, almost as though a thread were tied around it, leaving the mucous membrane adherent to the glans. The drawing here given, and made at the time by Dr. E. Develin, is a true representation of the conditions stated.



Treatment: Division of the constricting band, and also the prepuce was torn up from the glans. (Circumcision was not needed.)

This was at once done, and a mass of smegma was found behind the corona—simple water-dressing being then applied.

Ten days after, all dressing was removed, and the wound was completely healed. The prepuce can be fully retracted without any constriction whatever. All symptoms of diseased hip have entirely disappeared, together with uncertainty of gait and nervous phenomena; the child is walking straight and firmly.

Case II.—*B. G——, aged 5 years, native of Virginia.*

This boy has always, until recently, enjoyed good health, but at times would be extremely irritable, and hard to manage; and could not keep himself still. About two months ago the attention of the parents was drawn to this peculiar condition: more especially he would fall down without any perceptible cause, and then he could not get up without assistance; his speech also became very indistinct; and yet previously he had spoken remarkably plainly. He has never had any serious sickness, and has never had convulsions.

Before he had these uncertain movements, he had pain in his legs, but this in a measure soon disappeared, but the locomotion, and ability to grasp with the hands became very markedly impaired.

The physicians in charge stated his difficulty to be chorea following upon rheumatism. His mind was always perfectly clear, and he understood all that was said to him.

Upon examination, the boy was found to have a peculiar movement of both hands and feet; the face was partially idiotic in appearance. On examination of the sexual organs, he was found to be suffering from congenital phymosis and adherent prepuce, with the penis in an almost constant state of erection.

The treatment consisted of circumcision and tearing back the adherent prepuce from the glans.

The mother stated that she noticed a difference in his speech; that it was more distinct four hours after the operation. Three weeks after the operation he returned home completely cured—being able to walk, talk and use his hands as well as any other child. In this case the result was a complete success.

Case III.—*C. G. M——, male, aged 7 years.*

Child has always been very active, but extremely nervous. Nine months previous to coming to me he was jumping off a stoop; this was followed by severe vomiting. Physicians, one after another, were called in, until ten had seen the child, the only symptoms he complained of being pain and swelling in the groin. In spite of this array of medical skill, he did not seem to improve under their treatment.

At the time he presented himself to me he was well nourished, but extremely nervous, being very clumsy upon his feet, and tripping over everything or nothing. On examination of the penis, the prepuce was very redundant—the mucous membrane being adherent to the glans—and upon touching the meatus, there was immediately a spasm, which convulsed the whole body.

Circumcision was at once performed, and the prepuce stripped back from the glans.

Twelve days from the date of operation, the child returned home, having completely lost all abnormal conditions of the nervous system. Since that time I have heard frequently from the physician that sent him to me, that the boy was in

perfect health, sleeping well, and running around like other children, with a perfectly steady gait.

In connection with these cases occurring in children, I give that of an adult who recently came under my observation:

Mr. M——, agəd 25 years, an unusually well-developed, muscular man, but exceedingly nervous, came to me suffering from an injury to the spine from the plunging of his horse while horse-back riding, producing almost complete paralysis of the lower extremities, being unable to stand or walk without assistance, and suffering intense pain in the lumbar region. He was at once leeched, and this treatment was followed the next day by dry cups along the seat of the injury, and he was retained in the horizontal posture for some weeks. During this enforced quietude, my attention was directed to his extreme nervousness, which amounted almost to hysteria; and on examining his penis, I found this organ in a state of erection; the prepuce was firmly constricted around the glans, and it was with great difficulty it could be pushed behind the corona. The frænum was so very short as to draw the urethral orifice backwards and open. The least touch upon the meatus produced a peculiar nervous spasm of the entire body. The prepuce being drawn behind the glans, a thin white line was to be observed girdling the entire penis, and he complained of this causing him great pain. He then informed me that he suffered from constant erections of the penis, frequently lasting from twelve to eighteen hours. In many instances while in the society of ladies he would be compelled to leave the room, and frequently while horse-back riding he would have to get off his horse and abandon this exercise, as the penis would become so irritable and erect that semen would pass involuntarily from him.

I divided this girdling band upon the dorsum of the penis, and then divided also the frænum, tearing the latter down to the extent of nearly an inch, thus allowing the glans to assume its natural appearance, and removing all constriction.

Since the operation his nervous system has undergone a complete and entire change, and he will now leave on an extended European trip.

These are but a few of the cases I find recorded in my Case Book; but they are sufficient to illustrate the fact that this source of nervous irritation exists much more frequently than is generally suspected.

ART. V.—**Hæmorrhagic Malarial Fever, or Intermittent Hæmoglobinuria (?) in an Infant.** By JOHN P. FURNISS, M. D., Counsellor Medical Association of State of Alabama; Ex-President Dallas Co. Medical Society, etc., Selma, Ala.

During my residence (nineteen years) at this place, several cases of malarial fever have been reported by my colleagues as having occurred in very young children. Dr. C. J. Clark informed me that he once attended an infant eighteen hours old with distinct intermittent fever.

On *June 6th*, Mrs. J. T. H—— was delivered of her second child, a well-formed male, at 5:30 A. M. I visited her in the evening and the next morning, at both of which times the condition of mother and child was as favorable as could have been expected.

At 4 P. M. of the 7th, I was sent for to see the infant, who was reported as being very ill. I was told that at noon he was noticed to have fever, 102.5°; that soon afterwards he was deeply jaundiced, and that his urine left a port-wine stain on the diaper.

The fever subsided at 11 P. M., the urine cleared up, and next morning, when I saw him, the ictorode condition of the skin and eyes had nearly disappeared. A quarter-grain dose of calomel had been given, and inunctions of 25 per cent. oleate of quinine every three hours, were ordered.

At the same hour on the 8th, the child had a return of fever, with the same symptoms as on the day previous. Two grains of quinine, in half-grain doses, were ordered to be given next morning. There was no return of fever; the urine was normal, and the jaundice had disappeared.

I have seen quite a number of cases of hæmorrhagic malarial fever, but I have never before seen it in a child younger than four years old. The majority of such cases have a history of repeated attacks of intermittent fever. The urine does not always, at first, contain blood-corpuscles, but is frequently of a dark, dark-brown, porter, or port-wine color.

At the last meeting of the American Medical Association, Dr. Jerome Cochran, State Health Officer of Alabama, read an admirable paper on "Hæmorrhagic Malarial Fever,"* in which he stated that he had sent two specimens of urine for an-

*Since then published in May 30th issue of the *Journal of American Medical Association.*

alysis to Dr. George M. Sternberg, United States Army, who reported that "there was an absence of blood-corpuscles in every specimen sent; that this absence of blood-corpuscles, in my opinion, is satisfactory evidence that the color of the urine is not due to hæmorrhage from the kidneys; for blood-corpuscles, placed in normal urine, may be recognized at the end of ten days or more, and after the urine has undergone alkaline fermentation. That the color is due to the presence of hæmoglobin is proved by spectrum analysis, and by the formation of hæmin crystals when the port-wine urine is treated with glacial acetic acid and chloride of sodium, and heat is applied."

I do not undertake to say that there *were* blood-corpuscles in the specimens examined by Dr. Sternberg, but I do assert that I have seen cases of such fever die from *hæmorrhage* from the kidneys and bowels.

I recently saw, in consultation, a German laborer who was very ill with this fever. His first paroxysm was like that of the infant I report; but the subsequent paroxysms became more and more severe, and the urine deepened in color and increased in quantity and in the frequency with which it was voided. The aspect of the patient was that of one who had had a profuse hæmorrhage. I did not analyze his urine, but I have analyzed that of others, and they contained blood. Hypodermics of bimuriate of quinia and urea were given. The patient recovered.

I am aware that jaundice in the new-born is of common occurrence; and I have read statements of experiments on dogs, where injections of the bile salts into the blood current produced a sepation of the hæmoglin. In the case I have reported, the fever was distinctly intermittent, and there was almost complete disappearance of the jaundice and clearing up of the urine with the subsidence of the fever. On the third day the child looked well, and remained so for a month, the time at which I last saw him.

ART. VI.—**The Modern Methods of Electro-Diagnosis, and What They Teach Us.*** By C. L. DANA, M. D., New York city, Professor Nervous and Mental Diseases New York Post-Graduate College, etc.

One of the most satisfactory and helpful lines of progress in recent years has been in the diagnosis of nervous diseases through the aid of electricity. The labors of Erb, Hynes, Burnett, De Watteville, and others, have enabled us to tell in a precise manner the character and seat of many nervous lesions heretofore obscure. Nor does it need any extended knowledge of elaborate apparatus to make practical use of these recent acquisitions. It does, however, require very great care and conscientiousness in making tests, and a thorough knowledge of certain small matters of technique. A man must be thoroughly acquainted with his batteries, and must watch each detail in his work.

To illustrate the methods: We have a patient here who has a partial paralysis of the flexors of his right forearm, with some atrophy of his palmar muscles. We want to find out the electrical reactions in the affected part.

The patient is stripped and laid on the table, and we proceed to make the tests by the polar method, so-called.

You will remember that electricians call the positive pole of the battery the anode, and the negative the kathode. We place now one large electrode, connected with a galvanic battery, on the sternum, and this constitutes the "indifferent pole," because it is on no muscle, and has no direct effect on the part to be examined. We make this "indifferent pole" the anode, or positive, by using the current changer. We take now the other electrode, which, as you see, is a very small one, and has an interrupter on it, and apply it over the course of the nerves (ulnar, median and radial), and over the motor points of the forearm and hand.

Turning on a current of twelve cells, first thoroughly wetting the parts with salt-water, we apply this small electrode and close the circuit. This makes a closure-contraction with the negative pole.

The formula which we use for this is: "Ka. C. C.", and

*From a lecture, with charts, delivered before the students of the New York Post-Graduate School.

you will see, by comparing it with the sound arm, that the contraction is perhaps a little weaker than normal, but not much. We keep the current running through the nerve, and find that while we do so, there is no contraction. There is, in other words, no "closure contractive tetanus," or "C. C. Te." Now, on opening or breaking the current, we find also that there is no contraction, or no "Ka. O. C." Changing the poles, and using the positive instead of the negative on the forearm nerves, we get a slightly weaker closure contracture, but in other respects there is no change. The result of all this is expressed in the following formula:

Ka. C. C.>An. C. C.,

or kathode-closure contraction is greater than anode-closure contraction.

Ka. C. Te.=O. An. C. Te.=O.
An. C. C.=O. An.. O. C.=O.

Using now the Faradic current, and applying first the negative and next the positive pole to the nerves, we get in both cases good contractions, or Far. An. and Ka. C. normal.

The reactions are what we ordinarily find in healthy nerves, and we may set it down as established that in the present flexor paralysis the nerve is not at fault.

We apply our tests now directly to the weak and wasted muscles of the thenar and hypothenar eminence, using, as before, first the galvanic current.

Without going into details again, you see that the anode (positive pole) closure-contractions are a little weaker than those of the kathode (negative pole), but that they are prolonged, sluggish, and persistent, as though a Faradic current were running through them.

A kathode (—) opening contraction appears also, while an anode (+) opening contraction is absent. The formula is

Ka. C. C.=or>An. C. C.
Ka. C. Te. An. O. Te.=O.
An. C. Te. Ka. O. Te.

Applying now a Faradic current, we get only a very feeble contraction, even with a very strong current. In other words, the galvanic reactions show what are known as "modal" changes, and the Faradic current reaction is very weak, the whole constituting what is known as a "*partial degeneration reaction.*"

Our conclusion is, that there is a degenerative atrophy of the muscles of the palm; and from this and other facts in the history, we know that this patient suffers from progressive muscular atrophy of the spinal type; that is to say, an atrophy due to a slow degeneration of the muscular-trophic cells in the anterior horns of the spinal cord.

We have here a case of facial paralysis, or Bell's palsy, due to exposure. The paralysis came on suddenly about five weeks ago. Applying the poles of the two batteries, successively as before, we find that we get very good contractions with the galvanic current; but the anodal (+) closure-contraction, when over a facial muscle, is greater than the kathodal (—) closure-contractions. There are no opening contractions. The contractions are sluggish, and even tetanic, and over the nerve we get no contractions. With the Faradic current, over either muscle or nerve, we also get no contraction at all.

All this can be expressed by the following formula:

With galvanic current on muscle—

An. C. C.>Ka. C. C.
An. C. Te. Ka. C. Te.

On nerve—No contraction.

With Faradic current—No contraction.

This constitutes what is known as the "Degeneration Reaction." It indicates that the trophic supply of the muscle had been cut off through injury to the nerve, and that both nerve and muscle are undergoing, or have undergone, more or less degenerative atrophy.

By the partial degenerative actions we localize the disease as existing in the trophic nerve cells of the cord, or we infer perhaps that there is a slight lesion in the nerve. By typical degeneration reactions we know that a lesion is in the anterior horns or in the nerves. By exclusion, and by the help of other signs, we can thus often perfectly localize a seemingly obscure disease.

It would take a long time to go over all the different diseases in which electrical tests are of service, but I have, however, prepared nerve tables, by reference to which you can work up any particular case. I must impress upon you again the necessity of being extremely careful in making

these examinations, and they should be repeated generally several times.

Tabular View of the Electrical Reactions of Muscle and Nerve, and of the changes which may occur in them.

I.—Of Nerve: to Faradism,
Quantitative change of increase or decrease.
Qualitative change, none.
Of Nerve: to Galvanism;
Quantitative change of increase or decrease.
Qualitative change, none, or rare and slight.

II.—Of Muscle: to Faradism;
Quantitative change of increase or decrease following that of nerve.
Qualitative change, none.
Of Muscle: to Galvanism;
Quantitative change, increase or decrease. The increase may coincide with a decreased reaction of nerve and muscle to Faradism.
Qualitative change; these are of two kinds.
(*a*) Modal—*i. e.*, the contraction is sluggish, protracted, tetanic.
(*b*) Serial—*i. e.*, An. C. C.=or>Ka. C. C.: Ka. O. C=>An. O. C., both soon disappearing. Ka. D. Te. and An. D. Te. present and well marked, especially An. D. Te.

Tabular View of the Degeneration Reactions of Nerve and Muscle.

The degeneration reactions are dependent upon a degenerative atrophy in the muscle, due to a withdrawal of trophic influence of the cord, by reason of a lesion in the anterior horns, or in the nerves that supply the muscle.

The abbreviation used for degeneration reaction is "De. R."

The formula for a typical De. R. is—

I.—(*a*) Faradic excitability of Nerve
(*b*) " " " Muscle } is weakened or lost.

II.—(*a*) Galvanic excitability of Nerve is weakened or abolished.
(*b*) " " " Muscle is at first *decreased* (one to two weeks after beginning of the disease), then *increased* (for eight to ten weeks after beginning of the disease, or longer).

On testing by the polar method, we get the following reactions:

First, certain Modal changes. } The contractions are sluggish, protracted, and may run into a tetanus during flow of current.

Second, we get Serial changes. { An. C. C.=or>Ka. C. C. The opening contractions are soon lost, but if present, Ka. O.=or>An. O. C.
A. O. Te. and Ka. C. Te. are present and well marked, especially the An. O. Te.

Besides typical degeneration reactions, we get certain Partial Degeneration Reactions, in cases where the disease is less advanced.

Here the muscle shows qualitative and quantitative changes, while the nerve shows little or no change. Or the muscle may show only the modal changes, while the nerve responds to Faradism and galvanism.

The *partial De. R.* is observed in some cases of facial paralysis, or in mild forms of rheumatic, traumatic, or pressure paralysis. In progressive muscular atrophy (spinal type), in bulbar paralysis, in mild forms of acute polio-myelitis, and in amyotrophic lateral sclerosis, partial degeneration reactions are observed.

Table showing the Lesion, its Result, the names of the Diseases, and the Electrical Reactions.

LESION OF	RESULT.	DISEASE.	ELECTRICAL REACTION.
1 to 2½	Paralysis, contractures.	Hemiplegia from apoplexy. Embolism, tumors, lateral sclerosis.	Nerve: normal. Muscle: normal.
3, 4 & 5	Paralysis, degenerative atrophy of nerve and muscle.	Acute and chronic anterior poliomyelitis.	Nerve: De. R. Muscle: De. R.
2 to 2½ 3 & 4	Paralysis, contractures. Degenerative atrophy of muscle.	Amyotrophic lateral sclerosis.	Nerve: norm. } partial Muscle: De. R } De. R.
4	Degenerative atrophy of muscle. Paralysis from wasting of muscle.	Progressive muscular atrophy (spinal form); bulbar paralysis; mild forms of ant. poliomyelitis, chronic (?).	Nerve: norm. } partial Muscle: De. R } De. R.
Nerve.	Paralysis: degenerative atrophy of nerve and muscle.	Neuritis; wounds; toxæmia.	Muscle: De. R. Nerve: De. R.
Muscle.	Wasting cirrhous paralysis.	Simple atrophy; primary or idiopathic myositis.	Juvenile form of progressive muscular atrophy; pseudo muscular hypertrophy; other types of primary myopathies.

A general law regarding degeneration reactions is that they are found in general paralysis, due to lesions of the anterior cornua or of the motor nerves.

Clinical Reports.

Extirpation of the Uterus for Uterine Fibroid—Death on the Fourth Day. By A. M. TALLEY, M. D., Columbia, S. C.

Mrs. R——, a married multiparous lady, 60 years of age, from a neighboring city, consulted me on the first of July last in relation to an abdominal tumor, which she had first discovered eighteen years before. She had passed the menopause at the age of 48, and since that period had had no uterine discharge of any sort whatever. She was well nourished, with a tendency to embonpoint, though the expression of her countenance afforded marked evidence that her general health had suffered serious impairment. At the date of the discovery of the tumor, which first appeared as an ovoid body in the left hypochrondrium, she sought medical advice, and after a thorough examination by two intelligent physicians, whom at different times she consulted, she was informed that it was ovarian, and was advised to paint it with iodine, and await developments.

Pending this expectant treatment, the uterine functions were at no time notably disturbed, though the growth gradually and almost imperceptibly increased until it attained the proportions it presented at the date of my examination. For the past two years its increase had been more rapid, and the symptoms to which it gave rise became daily more and more distressing. These consisted of pressure on the bladder and rectum, giving rise to frequent and painful micturition and obstinate constipation, cramps in the muscles of the legs, pains in the back, dragging sensation in the loins, with frequent seizures of dyspnœa and palpitation of the heart.

An external examination disclosed a tumor equal in size to a gravid uterus of eight months, presenting certain not well-defined nodosities. There was dullness over the entire anterior aspect of the abdomen, which, without appreciable fluctuation, afforded to the hand a sense of solidity and firmness. Digital exploration could detect no trace of either os or

cervix uteri, though the examination was conducted in both the supine and the left lateral positions. A sound carried into the bladder indicated that its dimensions were greatly contracted, and the organ was displaced so as to lay beneath the tumor, and at right angles to the pelvic strait.

Feeling by no means satisfied with the results of my examination, as to the correctness of the diagnosis before rendered, I advised the lady to place herself under the care of Dr. Skene, of Brooklyn, or of Dr. Thomas or Dr. Bozeman, of New York. To this, however, she would not consent, and expressed her purpose to have me do the operation, and that, too, without delay. I laid before her its hazards, which I foresaw would be of great magnitude, and again insisted upon her availing herself of the skill and experience of one of the distinguished gentlemen whom I have mentioned. But all to no purpose.

She was fixed in her determination that I should operate; and accordingly, on the 7th of July, at 11 A. M., aided by Drs. Taylor, Munro, Howe, Gaubert, Kendall, and Darby, the patient being fully etherized, I proceeded to do laparotomy. An incision four inches in length was made in the mesial line, beginning a little below the umbilicus; the peritoneum was exposed and opened, and the adhesions upon the anterior surface of the growth separated. It now became speedily apparent that the size and consistency of the tumor precluded its extraction through the incision made. This was then enlarged to the extent of four inches, making the entire length of the abdominal opening eight inches. Burrowing behind the huge mass which filled the abdomen, I broke up with my hand its attachments—not without great difficulty, and unavoidable loss of blood. Upon lifting the tumor from its bed, the uterous and right ovary were found firmly adherent to its posterior and inferior wall, whilst to the left of these, and incorporated in the mass, lay what at first sight appeared a coil of intestine filled with fluid, but which further scrutiny showed to be an elongated cyst. Enucleation of the tumor was accomplished without difficulty, and in the walls of the immense cyst which remained the atrophied body of the womb with an almost obliterated cervix presented itself. The finger, passed into the vagina, disclosed a cul-de-sac without vestige of either os or cervix uteri. As the hæmorrhage from the cyst was copious, it was determined to remove the entire sac, and with it, of course, the uterus and right ovary, which latter was also firmly imbedded in its structure. This was effected by pass-

ing a stout double silk ligature through the attenuated neck, ligating the mass on either side, and severing the pedicle one inch from the point of insertion of the ligature. To guard against hæmorrhage, recourse was had to Paquelin's thermo-cautery, with which the stump was thoroughly charred—the parts beneath being protected by Henry Smith's hæmorrhoid clamp. The usual antiseptic "toilette" was then made, leaving one of Thomas' glass drainage-tubes in the lower angle of the wound.

The operation lasted two hours and thirty minutes; and notwithstanding the patient had been, during all that time, under the influence of ether, and was alarmingly prostrated, she rallied fairly well, and survived till the morning of the fourth day, when she succumbed to septicæmia. Subsequently to the operation there was neither hæmorrhage nor suppression of urine, and until twenty-four hours before death, no abolition of consciousness.

Though no autopsy was had, I was permitted, on removing the drainage-tube, after death, to note that the wound had united throughout the greater part of its extent.

The tumor weighed sixteen pounds, and consisted of a dense semi-cartilaginous structure, presenting upon its surface the slight irregularities, or, more properly, nodosities, before mentioned. The uterine cavity was much contracted, and the cervix was reduced to a flattened fibrous band, through which no trace of the canal could be discovered. The right ovary, as already stated, was firmly adherent to the cyst, though the left one could no where be found, either during the operation or subsequently by examination of the cyst.

"A Genuine Case of Hydrophobia Cured." By H. EMMET WOOTTEN, M. D., Kempner, Texas.

On the night of April 15th, 1885, I was called to see Henry Dyer, a youth of 16, living with his parents at Bucher's Gap, Coryell county, Texas, who had been bitten by a rabid dog twenty days previous, in the calf of the right leg, taking out a piece of flesh one inch in length. He was having spasms, and was tied down to the floor with strong ropes. I was told that he had been snapping and foaming at the mouth

for six hours, and had convulsions every thirty minutes. I at once administered twenty grains of the bromide of potassium in glycerine and water, and gave him an hypodermic injection of morphia, one-half grain every two hours, until the spasms ceased, which they did at 9:30 o'clock on the following day. I applied a plaster of sub-nitrate of bismuth one inch thick to the bitten leg and kept it there until the third day. *It brought away nearly a pint of greenish pus;* when the patient was able to leave his room. I attribute his cure to the bismuth and potash. I also gave him ten grains of calomel the second night, which operated finely. The young man is now well and has been working every day since as a farm laborer. The dog bit a cow and a sow upon the place, both of which died the tenth day. The dog was killed that day by Mr. Abner Easley, a near neighbor.

Correspondence.

Choleraic Diseases.

Messrs. Editors,—When we come to look at the dissimilarity running all through the organic kingdom, how far are we right in naming diseases after the similarity of other diseases, when we know that a near approach of dissimilarities make the same thing and this same thing may be different from itself in origin? Can you find any two blades of grass, or leaves, or trees, or human faces, or human constitutions exactly alike? Yet this dissimilarity has its origin in similarity, it may be. According to our limited knowledge of the departure from health we agree that there is in these affections a hepatic pathogenesis oftener than otherwise and the causes of this are not necessarily similar, nor are the effects and remedies even in the same case at different stages; and certainly in different cases similar effects and similar remedies would make an homogeneity at variance with all nature. The microbes (mikros and bios) may have similarity in the long run or in their origin, but their dissimilarity is more to our purpose to study in order that we may combat them scientifically.

Admitting then that according to the laws of nature the apparent or real similarity of these microbes does not contra-indicate dissimilar appliances in different stages of the same case, and in different cases (cases in different persons) —desication may be the preventive in one case and hydration in another. Then when Bilroth says water is the remedy and Koch says no water but the contrary, who, it might be asked, is right? Does it not accord with nature to say they are both right? Yours respectfully,

WM. S. STOAKLEY, M. D.

Bay View, Va., Aug. 1st, 1885.

An Explanation.

Messrs. Editors,—I find in the August number of your Journal, a report by Dr. B. C. Keister, South Boston, Va., of a case of spasmodic asthma, due to fatty tumor of the neck, etc. The doctor prefaces this report by saying, that the husband came in speedy haste to this place for his family physician, and finding him absent, applied to him to visit his wife whom he stated was in one of her attacks, etc. As at that time there were only two physicians residing here, the doctor and myself, of course he must refer to me.

Now, in justice to myself, allow me to say, that I never was this man's family physician, and never saw his wife in one of her attacks. It is true, that, two years before Dr. Keister saw her, the woman applied to me for something, in her own vernacular, "to prevent spells of difficult breathing." I acceded to her request, with much benefit too, as she afterwards reported. I suppose her husband for that was induced to seek my aid again. Had she been seen in one of her paroxysms it is hardly probable that a tumor the size of a turkey egg would have escaped my observation, and had an operation been deemed advisable it could have been performed with certainly no greater discomfort to the poor woman than that which she really indured.

Very Respectfully,

A. TRENE CLARKE, M. D.

South Boston, Va., Aug., 25th 1885.

Analyses, Selections, etc.

Prolapse of the Rectum.

In the *Polyclinic* for June 16, 1885, appears an excellent clinical lecture by Prof. C. B. Nancrede, of Philadelphia, relating to this subject, from which we make the following abstract. After speaking of this condition of the bowel in young children, and some of the causes for its occurrence, he went on to relate the details of his general treatment in such cases. He called attention to the paramount importance of not allowing the child to strain at stool, nor even to sit any length of time, on such occasions. The motions should only be passed lying on the side, at the edge of the bed, or even standing, and, whichever position was employed, traction should be firmly made upon one buttock, so as to tighten the anal orifice. The credit of this valuable aid to treatment he gave to Dr. H. Macormac, of Ireland, who first showed its worth to the profession in 1843. The lecturer advised the invariable use of a plain enema of cold water before each rectal action, with a thorough bathing of the parts with cold water afterward. An unirritating astringent injection should be thrown up into the rectum, such as a decoction of white oak bark, or a solution of the sulphate or sub-sulphate of iron. He went on further to speak of the various mechanical appliances which have been suggested to retain the prolapsed bowel in place, after returning it to the rectum. A pad of oakum or tow, or better than either, a piece of soft sponge, should be placed over the anus, and the buttocks firmly pressed together and retained in position by a broad transverse strip of adhesive plaster. This pad, however, should be used only in those cases where the skin is not irritated; and when, despite the careful bathing of the parts in alcohol, it does become inflamed, some one of the many anal trusses must be resorted to, if the case is a very old or desperate one, otherwise an operation for the radical cure of the affection should be performed.

In answer to the question as to which cases had best be operated upon, he could only say, those in which palliative measures are either inapplicable or inoperative. As to the method of operating, he called attention to the study of the pathology of the affection, for a proper understanding of the subject. When from any cause the mucous coat of the rectum has slipped away from the muscular coat, on account of the elongation and laxness of the sub-mucous coat, this con-

dition (prolapsus) is of course established. Now, naturally enough, anything which will set up a certain degree of plastic inflammation in that sub-mucous coat, will glue together, as it were, the mucous and sub-mucous coats, thus producing a cure—always provided the sphincter ani muscle is not in a condition of atony or fatty atrophy.

The lecturer then referred to the different means of producing the necessary plastic inflammation, and clinically described the operation he preferred as the safest and most expeditious. After etherizing the patient and elevating the hips upon a pillow, he reduces the prolapsed part, and introduces a large-sized Sims' speculum. Then with the thermo-cautery, at a dull red heat, he draws three or four lines, commencing about two inches within the anus, and bringing them down to the delicate muco-cutaneous margin. An opium suppository, and a pad and bandage, complete the operation. The lines mentioned may be drawn with a pointed glass rod dipped in nitric acid, or the actual cautery, or the galvano-cautery may be employed, but in his opinion neither equalled the thermo-cautery for simplicity and safety.

He called attention to the importance of the after treatment. The patient must retain the recumbent position for at least a week, all stools being passed in the lateral position, or into a bed-pan; and even after leaving the bed the bowels had best be moved in one of these ways for a week or ten days longer, all symptoms of costiveness being relieved by enemata rather than purgatives. Care should be taken for months afterward to keep the buttocks as closely together as possible during an operation of the bowels.

Should the first operation fail to produce a radical cure, a second may be performed, and new lines can be drawn between the old ones, or a series of scattered points may be touched with the cautery, great care being exercised, however, not to destroy too much tissue lest a stricture result.

Treatment of Hare-Lip.

The *Maryland Medical Journal*, July 18, 1885, contains the conclusion of a valuable article on "Surgical Treatment of Infants," by Dr. De Forest Willard, of Philadelphia, from which we take the following on the hackneyed subject of hare-lip. Notwithstanding the fact that this affection has been so thoroughly written about in past years, there is much that is practical and original in Dr. Willard's remarks upon the treatment.

He thinks, and very truly, that the proper relief of the

affection is not only a matter of surgical skill, but of surgico-artistic skill, the region being of so much importance in a cosmetic point of view. After referring to the wide diversity of opinion expressed by surgeons as to the best time of infantile life when the operation should be performed, he says his rule is to relieve the deformity within three or four days if it interferes with the proper nursing of the child, although practically it often happens that by the end of the operation the milk has left the mother's breast, unless natural means have been taken to keep up the flow. He prefers to wait, if possible, about three months, until a full, vigorous activity of growth and cell section is at work, and before dentition has commenced. Besides this reason, the child at that age cannot use its hands as freely as at a later period, thus avoiding some risk of injury to the patient.

When operating upon fractious children, he no longer uses pins, but uses small catgut sutures for the mucous surfaces, which if properly inserted and tied in three knots, will remain in position until union occurs. For the skin edges he uses carbolized interrupted silk sutures, his reason for stitching the two surfaces separately being that there is less linear depression of the cicatrix, and less constriction of tissues is thereby exercised, than by pins and figure of eight, while if each set penetrate half way through the lip anterio-posteriorily, the sphincter is thoroughly controlled. One of the stitches should pierce the coronary arteries. He prevents any pouching of the flaps or separation of the deeper parts by oozing, by means of drainage by horse-hairs left in for a few hours. He is not satisfied to simply apply transverse strips of plaster over the wound, but prevents any strain upon its lips by placing another strip on either side, beginning on the neck in front of the sterno-mastoid muscle near the horn of the hyoid bone, thence running just above the angle of the mouth across the opposite malar bone to the front of the ear. If these are all placed in position while the cheeks are held well together, it will be found, on releasing the grasp, that the minimum of tension is exerted upon the stitches. An excellent plan also is to have the nurse regulate muscular action of the face during the first few days after operation, by pressure upon the cheeks whenever the child cries or eats.

As it is only by securing union by first intention that a narrow cicatrix can be hoped for, Dr. Willard does not allow the child to suck, as is the practice of some surgeons, but much prefers spoon feeding as producing less disturbance of

the parts, and for the same reason does not hesitate to use anodynes to control pain and hold the little one in as quiescent a state as possible, of course keeping the patient in as perfect a physical condition as can be managed.

He does not use the simple inverted V-incision, but commencing the cut at the apex of the cleft, stops just before reaching the border of the lip, thus leaving a base of supply to nourish the flap which remains on either side—in this avoiding the marginal depression so commonly seen where the first named method is adopted. The two flaps, when the parts are brought together, project downward and form a fleshy prominence, but if the stitching is nicely done, subsequent absorption will, in a year's time, give only a slight projection. Even should it remain too large, a simple scissors cut will remove any deformity, while the ugly notch sometimes left after the V-incision can never be corrected.

Treatment of Fever Thirst.

The *Medical Age*, August 10, 1885, copies from one of the East Indian medical journals what seems to be a very practical and valuable hint in reference to the quenching of thirst in fevers, which is given the profession by Surgeon-Major S. K. Cotter, of the Indian service. If further observation should show that this method can be depended on as a rule, a most distressing condition can be better relieved than by any means hitherto employed in practice. It is to be hoped that enough of our readers will experiment with it to decide upon its real value, and report to the *Monthly*. The surgeon relates that a patient, suffering from enteric fever, was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sordes. The tongue was painted with glycerin, and, as a result of the first trial, sleep was maintained for two hours; when the patient awoke his tongue was again painted and with a similar result. The doctor offers several theories to account for this favorable action, but neglects to refer to the strong affinity of glycerin for water, which, we agree with our contemporary, was without doubt the proper explanation of the happy result.

Treatment of Whooping Cough.

In his summary of treatment, in a clinical lecture delivered at the Philadelphia Hospital (*Medical News*), Dr. John M. Keating emphasizes the value of the steam spray and the atomization of medicated solutions, among which he ascribes value to Dobell's solution, eucalyptol, and thymol. With

the bichloride, he advises caution. Corrosive sublimate, which is now used for almost everything, he says, has also been applied here in the form of the spray. He remarks that it is a dangerous drug to put into the hands of an inexperienced person, and, as we have so many other useful remedies for this affection, he thinks it wise to avoid the use of corrosive sublimate. He has used Listerine extensively with good results in the treament of whooping cough. He employs it in the strength of one drachm to two ounces of water, with an ordinary hand-atomizer. He directs the nurse to apply it twelve or more times a day, and finds that little children, even babies, do not object to it. He adds to it tincture of belladonna, potassium carbonate, or ammonium bromide, as the case may demand. Chloride of ammonium he also finds of great service in the form of spray.--*New York Medical Journal.*

Extract of Pinus Canadensis for Piles.

Dr. C. H. Davis, of Funkhannock, Pa., writing in praise of this form of treatment for a most unpleasant condition, says: "I can speak positively of the great value of Kennedy's Ext. Pinus Canadensis. I have been treating a case of protruding piles of twenty years standing, making life almost intolerable at times. They had been treated for years with only palliative results. About a year ago an operation was submitted to, since which time the tumors have remained smaller and less sensitive, but a new trouble soon set in, namely, itching to a terrible extent, which nothing seemed to relieve until I tried the Ext. Canadensis—two parts to one of glycerin—two or three applications of which relieved the itching entirely, and the disease is being rapidly benefitted in every way. Have used it only once a day after each evacuation. I find it an excellent remedy in leucorrhœa also."

The Hydrangea Aborescens.

The value of this native plant in renal affections was first made known by Dr. S. W. Butler. Recently Lambert & Co., of St. Louis, have combined the active elements of the plant with lithia in a preparation called "Lithiated Hydrangea," which unites the virtues of both these remedies. In the *Chicago Weekly Review*, two cases of rheumatic gout with renal complications are reported by Dr. F. S. Senier, of Waukesha, Wis., where this preparation in doses of a drachm, thrice daily, largely diluted, acted with prompt and satisfactory effect. The combination seems to us a happy one.—*Medical and Surgical Reporter, Philadelphia.*

Book Notices.

Kirke's Hand-Book of Physiology. By W. MORRANT BAKER, F. R. C. S., Surgeon to St. Bartholomew's Hospital, and Consulting Surgeon to the Evelina Hospital for Sick Children; Lecturer on Physiology at St. Bartholomew's Hospital, etc., and VINCENT DORMER HARRIS, M. D., Lond., Demonstrator of Physiology at St. Bartholomew's Hospital. 1885. Eleventh Edition. Vols. I-II. With Nearly Five Hundred Illustrations. 8vo. Pp. 373-378. New York: Wm. Wood & Co. (For sale by West, Johnston & Co., Richmond, Va.)

This ever-popular student's annual represents in its two volumes the February and March numbers of "Wood's Library of Standard Medical Authors," and is an excellent addition to it.

Through all the years this work has been published—bringing it now to its eleventh edition—it has been a guide-book in this department of science to the English medical student. It was—when its talented author first introduced it to the notice of the profession—intended for a "working-book" more than a "book of reference," and, notwithstanding the many changes made by later editors, necessarily caused by advances in this "study of life," it is to-day essentially of the same standard. The present edition represents the best knowledge investigators possess upon the subject, and it is presented in a way which is at once pleasant and emphatic. We see so much to admire in the manner in which the subject of physiology is offered in this work, that, prejudiced in favor of Dalton, as a text-book for medical students, as we are, we wish that it was more frequently put to such use nowadays. A more practically valuable work for the student and practitioner on any one especial subject is not easily found. Mr. Baker and Dr. Harris deserve the fullest credit for making this latest edition the peer—if not the superior—of any one of the preceeding ten. Some things—and, if our memory properly serves us regarding a ten year old edition, many paragraphs and pages—have either been altered from the earlier books or thrown out altogether, but their place has been amply supplied. We can see on first examination, the addition of much which certainly required mention, concise or full, and we are ready to believe that nothing has been omitted which was really necessary for the knowledge of the average student. Many new illustrations have been added, and special attention may be called to the handsome colored plate of "absorption spectra" of

the blood and bile, drawn by Mr. W. Lepraik from his personal observations, to be found in the first volume.

Much first-class microscopical work has been done by Mr. S. K. Alcock for engraving in the present edition, which to the careful student much enhances its value. In fact, we cannot speak too highly of this hand-book of physiology.

C.

Modern Therapeutics of the Diseases of Children. By JOSEPH F. EDWARDS, M. D., Associate Editor of the *Medical and Surgical Reporter*, etc., 1885. Philadelphia: D. G. Brinton. 8vo. Pp. 346. (By mail from Publishers.)

This book is, as may be judged from the title given, one of that excellent series of volumes entitled the "Modern Therapeutic Series," which comprises those relating to "Medicine," to "Surgery," and to "Gynecology and Obstetrics." There has plainly been no falling off in the effort to achieve a high standard for these works. They are, each one, well worthy of a place in the general practitioner's library, and this last one is, in general, of special value, to be studied and referred to after the reading of any one of our many valuable pediatric text-books. We think too frequent reference has been made to the writings of certain famous authorities on diseases of children—excellent as such references must of course be—and that the extra space given so freely to such masters of their special branch of medical science as Henoch and Semple, might perhaps be as well employed if the therapeutics of more of our American writers were described. Not that details of home treatment have not been fully and freely given, but that "provincial journals" have not been as closely and carefully scanned as it is possible they should have been. Hardly a journalist in medicine but who has, every week or so, to remark on some little, or perhaps extensive, change in the regular treatment of a certain disease, offered as the work of a "country doctor," and found in an exchange not published in a city large enough to support a post-graduate school of medicine. There are also many more valuable therapeutic hints to be found in the annual *Transactions* of State medical societies, which would be well appreciated if brought to the attention of the medical public. A volume of the kind we now notice is always of value for hurried reference, and probably it would have been difficult to find for the work a better editor than Dr. Joseph Edwards.

C.

A Manual of Organic Materia Medica. By JOHN M. MAISCH, PHAR. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Second Edition. 12mo. With Two Hundred and Forty-Two Illustrations. Philadelphia: Lea Brothers & Co. 1885. Pp. 511. (For sale by West, Johnston & Co., Richmond, Va.)

The author, in his sub-title, calls this book "a guide to materia medica of the vegetable and animal kingdoms, for the use of students, druggists, pharmacists and physicians," and he has well fulfilled the promise of such title. We had much commendation to give the first edition, when issued in 1882, and we can see much practical improvement even upon that. The design of the author when issuing the first edition, especially to the pharmaceutical profession—convenience of method and practical applicability—seems to have been gained upon, judging from the active demand for the work by those interested in this class of medical literature. To the student of pharmacy we can imagine no work better suited, and cannot wonder at the fact that it is a text-book in pharmacal schools. We fancy the student in medicine would find it too technical for his use, although it is a book which should find a place in the physician's reference library. The author has made a classification which differs in some degree from that of other American writers on this subject; after his introduction he divides the book into three parts, viz.: Animal Drugs—Cellular Vegetable Drugs—Drugs Without Cellular Structure—and his sub-divisions of these seem excellent.

Altogether, we can think of no work devoted to pharmacognosy better fitted to the use of the pharmacist or druggist. A full index completes the book. C.

A Hand-Book of Pathological Anatomy and Histology. By FRANCIS DELAFIELD, M. D., Professor of Pathology and Practical Medicine, College of Physicians and Surgeons, New York, and T. MITCHELL PRUDDEN, M. D., Lecturer on Normal Histology in Yale College. 8vo. New York: Wm. Wood & Co. 1885. Pp. 575. (For sale by West, Johnston & Co., Richmond, Va.)

This is the second edition of this most valuable work to the student of histology, and the improvement even upon the first excellent edition is marked. The first named author has associated with himself one of the best of the many good pathologists and histologists in New York, and both gentlemen have entered into their work *con amore*, the result being a standard book. The edition first offered to the pro-

fession was intended almost exclusively for those members of it who were required to perform *post-mortem* examinations, but in this, the scope of the work has been very much extended.

Dr. Delafield says it is intended to supply the needs of those who desire to add to their clinical knowledge a knowledge of the lesions of disease, and a careful examination shows it most admirably adapted for such purpose—not only to the practitioner but also to the student. The book—unlike most works of like kind—is not intended so much for the professional pathologist as for the practising physician, and it has been written from the latter's point of view. An excellent idea can be gethered as to the features and characteristics of the volume by a brief recapitulation of its part titles. Part first deals with the Method of making Autopsies, and Preserving Diseased Tissues—part second, Morbid Changes in the Circulation of the Blood, Bacteria, Inflammations, Tumors, etc.—part third, Morbid Anatomy of the Organs—part fourth, Lesions found in the General Diseases; in Poisoning, and in Violent Deaths. The index accompanying the book is particularly full and complete, adding much to its value. C.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Floating Minute Organic Matter in the Air and its Management to Prevent Diseases, etc., with a New Device for Atmospheric Purification. By DAVID PRINCE, M. D., Jacksonville, Ill. [The author's new method is such that it filrates the air of a room three times—once by steam, and twice by water—clearing it of all zymotic impurities; and seems worthy of attention by the profession.] (Reprint from the *St. Louis Medical and Surgical Journal*, February, 1885.) Pp. 16.

Weak Sight as the Result of Insufficient Light in Our Schools. By CHAS. M. SHIELDS, M. D., Lecturer on Diseases of Eye, etc., Medical College of Virginia, Richmond, Va. [This little pamphlet contains the author's views on a decided connection between the two things. His observation goes to show that the eyes of public school pupils are not only in danger, but are often injured from this cause. It is worthy of careful reading.] (Reprint from the *Sanitary Monitor*, June, 1885.) Pp. 8. C.

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LANDON B. EDWARDS, M. D.....WILLIAM H. COGGESHALL, M.D

Original Contributions solicited from all sections; but the Editors do not hold themselves responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the editors. Rejected articles held one month at disposal of writer.

Editorial.

Medical Examining Board of Virginia—Important Notice.

By a letter from the President, Dr. Wm. C. Dabney, of Charlottesville, Va., dated August 25th, 1885, we are authorised to announce the *change of time* of meeting of the Virginia State Board of Medical Examiners, at Alleghany Springs, to 10 A. M., Tuesday, September 15th, 1885. The object of this change is that those who pass satisfactory examination before the Board may at once apply for membership in the Medical Society of Virginia, and thus enjoy all the privileges of membership from its opening session Tuesday night. All parties proposing to be examined for license to practice medicine in Virginia before this session of the State Board of Medical Examiners should pay prompt and special attention to this notice, and should put themselves in immediate communication with the Secretary of the Board, Dr. Hugh T. Nelson, Charlottesville, Va.

Medical Society of Virginia.

The Sixteenth Session, to convene at 8 P. M., Tuesday, September 15th 1885, promises to be of unusual interest and profit. Fellows of the Society have never before been so active in securing additions to the membership, and ap-

plications have been coming in briskly from every part of the State since the Announcement of the Executive Committee was issued early in August. The Session is promised the attendance of some distinguished visitors, among them Dr. Lewis A. Sayre and George T. Harrison—both of New York city, and Honorary Fellows of the Society—and Dr. J. S. Conrad, the eminent alienist, now in charge of Matley Hill Sanitarium, of Maryland. Most of the distinguished genlemen of the Virginia profession will also be in attendance. The programme stated in the Announcement shows a list of interesting topics to be discussed by able writers and reporters. All in all, this session promises to be the best of the many good ones held.

The Medical Society of Virginia is organized, as we think, on a better plan than most State organizations, in that it is not a delegated body, but every Fellow, as soon as elected, enjoys equal privileges with any or all the rest of Fellows. This plan tends much more to interest the individual members, while it allows an equal opportunity to every Fellow to bring himself into professional prominence. Hence, no one can complain at the end of a session that he has been overlooked, or that his section has been ignored, for the responsibility and duty of bringing himself or his section specially forward rests solely upon the individual.

There is one prominent point of view from which this organization should be looked at by those not yet connected with it which has not been seized upon. The Society is organized to promote professional and public interests. It has accomplished much already in the way of developing professional study and consultation, and the result is that year after year the volumes of *Transactions* contain valuable articles that would never, perhaps, have been prepared had there been no such Society. A State Board of Medical Examiners has been established, whose certificate of proficiency is more to be valued than the diplomas of graduation of most of the medical colleges of the country. In a few years, this Board will effectually weed out of the professional field the tares and stubble that offend intelligent doctors and trip the blinded and ignorant people of the Commonwealth. Those who are out of the Society, in great part enjoy these and other benefits of the organization without contributing a farthing to it. This is a species of "sponging" upon the good nature of others—much like him who is ever borrowing his neighbor's newspaper without subscribing to one himself.

Another view to be taken is this: That the Medical Society of Virginia, already composed of most of the talent, activity and influence of the State profession, does not intend to remain idle, but will from year to year extend its influences, guided by a judicious counsel of its own, and sooner or later will so completely secure the membership of the larger proportion of the worthy doctors of the State as to make a marked distinction between the regular and irregular practitioner. Such a policy of the Society, planned for the general good of the public and profession, will become generally known among the laity; and then the people will want almost altogether those doctors for their family physicians who are recognized as in proffessional affiliation with the other doctors of the State. Thus the people will drive the worthy doctors into the Society who ought now voluntarily to contribute to its growth and usefulness.

The Society has other purposes to accomplish which circumstances have not yet permitted it to undertake. The Virginia Society wants to begin at an early day a road to new scientific investigations and researches which can best be worked by organized effort. A system of prizes for practical original work will probably be one of the methods adopted. The State Board of Health, which must look to the State Legislature for pecuniary support, is to be lifted upon a useful, working platform by the united effort of the members of the Society. Objectionable laws of the Commonwealth such as those that deny remuneration for medical expert testimony in courts, that allow but a pittance for legally authorized post-mortem examinations, that make no compensative provision for required professional services rendered the poor of counties and towns, that give no prior claim to the doctor under certain circumstances for the collection of his fees—these and many other acts of commission and omission are to be corrected only by a thorough organization of the profession, when a resolution to do means nothing short of successful accomplishment.

We hope the three aguments of *self respect*, *self iuterest* and *public good* will induce every worthy practitioner of Virginia to forward his application *at once* to the Secretary—the senior Editor of the *Virginia Medical Monthly*—giving name, Post-office, county, date and College of graduation in Medicine, the name of some Fellow of the Society to whom reference may be made for recommendation, and the Initiation Fee, $2. All letters written *after* September 11th, 1885, till September 17th, intended for the Recording Secretary,

or for the Treasurer, (Dr. Richard T. Styll, of Richmond, Va.,) should be addressed to either of them at the Alleghany Springs, Montgomery Co., Va.

We have presumed to occupy so much of our editoral space in speaking about the Medical Society of Virginia because the facts alluded to may be usefully suggestive to subscribers in other States in reference to their State organizations, and because we hope to induce some Virginia doctors who have not considered the subjects alluded to become aroused from their insecure repose, and beget themselves to active work for the good of the profession at large and for their own individual benefit. We urge all worthy doctors to delay not a moment in sending in their applications for membership in their State Society. Fellows of the Society and applicants for membership will be guests of the generous Proprietor of Alleghany Springs, Capt. C. A. Colhoun, durduring the session. As for routes and rates, each member had better see his railroad ticket agent in advance to learn whether or not he has received instructions which have been named to the Secretary of the Society.

New England Medical Monthly.

We notice with regret accounts of the fire occurring in the office of Dr. Wm. C. Wile, the talented editor of this first-class medical periodical, on the evening of Sunday, July 12th. The loss is quite heavy to the doctor, as, besides the loss of all his exchanges, and much matter already prepared for his journal, he loses many reference books and considerable manuscript which related to the "Medical History of Connecticut," a work of great value to the profession of that State, which he had had in preparation some time. Notwithstanding this vexatious accident, the doctor announces the "History" as forthcoming, although much later than was expected. We extend our sincere sympathy to Dr. Wile, and with pleasure offer him any back numbers of the *Virginia Medical Monthly* he may require to fully supply his files. We trust his editorial rooms are by this time in thorough working order.

Instruction in Nervous and Mental Diseases, etc.

We call the attention of our readers to the advertisement of the Department of Instruction in Nervous and Mental Diseases, and Electro-Therapeutics, of the New York Post-Graduate School, to be found on another page, and take occa-

sion to praise its methods of work highly. We know of no place in the country where this class of teaching has its superior. The instructors are earnest, hard-working professional men, with excellent opportunities for procuring clinical material, which they embrace to the utmost. Any practitioner desiring this special instruction would do well to pay the department a visit.

The Third Annual Meeting of the American Rhinological Association

will be held at Lexington, Ky., October 6th, 1885. Papers and Discussions will be devoted exclusively to the Diseases of the Nasal Passages and their sequences. President, Dr. P. W. Logan, Knoxville, Tenn.; Vice-Presidents, Drs. A. DeVilbiss, Toledo, Ohio, and J. A. Stuckey, Lexington, Ky.; Secretary, Dr. C. A. Sims, St. Joseph, Mo.; Librarian, Dr. N. R. Gordon, Springfield, Ill. Council: Drs. J. G. Carpenter, Stanford, Ky. H. Jerard, East Lynne, Mo.; H. Christopher, St. Joseph, Mo.; E. F. Henderson, Los Angelos, Cal. Information concerning the full Programme, Membership, Papers, Attendance, etc., may be obtained from any of the above officers of the Association.

Valentine's Meat Juice Hypodermically.

Dr. W. R. Lambuth, Surgeon-in-Chief of Soochow Hospital, China, asks, through us, for information concerning the hypodermical use of Valentine's Meat Juice in the treatment of opium habit. If any of our readers have ever so employed it, or know of such employment, they will confer a favor upon the doctor and ourselves by communicating their experience through the columns of the *Virginia Medical Monthly*, or, if preferable, directly to Mr. Valentine, of this city.

A Good Opening for a Young Doctor.

We call especial attention to the advertisement, to be found elsewhere, in which an old country practitioner desires the assistance of a young physician. The location is excellent, and the opportunity one not often offered.

Obituary Record.

Dr. Frank Spencer.

At the meeting of the Medical Faculty of Lynchburg, at the office of Messrs. Faulkner & Craighill, to take action on the death of Dr. Frank Spencer, Dr. T. L. Walker was called to the chair and Dr. Blackford appointed as secretary.

On motion the chair appointed Drs. Clark, Latham and W. T. Walker, Committee on Resolutions, who reported the following, which were adopted.

Whereas, The physicians of Lynchburg desire to testify their respect for the memory of Dr. Frank Spencer, who departed this life on the 20th of July 1885, therefore

Resolved, That in his death a severe loss has been sustained by the medical fraternity and by the community at large.

Dr. Spencer was a skillful and faithful physician, valuable alike in the sick room and in consultation. As a member, for many years, of the Board of Health of this city, his services were always useful, especially in the small pox epidemic, a few years since, when his devotion to duty and his exposure of himself elicited general comment. At the bedside of the sick his gentleness was scarcely less potent than his skillful treatment; and none who have seen him in the presence of the dangerously ill, can forget the pertinacity with which he fought the destroyer, even when hope was exhausted.

As a Christian and gentleman, Dr. Spencer was too well known in this community to need any tribute from his medical brethren. All knew whilst his detestation of what was mean, sometimes prompted him to be severe in denunciation, yet his characteristic trait, was his promptness to make amends when convinced of error. But the pre-eminent element of his high character was his fidelity as a friend. Those who knew him best, bear willing testimony to this virtue, as it dwelt in him; and certain it is, that the suffering poor of Lynchburg will not soon forget him. Truly his many virtues entitled him to Horace's choice line:

"Justum ac tenacem propositi virum."

Resolved, That a copy of this tribute be inserted in the Lynchburg papers, the *Virginia Medical Monthly*, and the St. Mary's county, (Md.) papers, and also furnished to his family. THOMAS L. WALKER, Chairman.

BENJ. BLACKFORE, Secretary.

Geo Rawlings, M.D.

A. HOEN & CO., BALTIMORE

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RICHMOND, OCTOBER, 1885.

Original Communications.

ART. I.—**Biographical Sketch of George Reuling, M. D., of Baltimore, Md.** Prepared by O. ZIMMERMANN, M. D., Baltimore, Md.

On the 1st of October of last year, the Maryland Eye and Ear Infirmary of Baltimore city completed the fifteenth year of its existence. As this institution was the first one of its kind south of Philadelphia, and as Dr. George Reuling, its surgeon, was the pioneer in his special branch of surgery in Baltimore, we deem it of interest to give a short history of the work accomplished by the institution, and also a biographical sketch of its surgeon, in the present issue of the *Virginia Medical Monthly.*

Dr. Reuling was born in the year 1839, in Hesse-Darmstadt. He is the son of Dr. Robert Reuling, and belongs to a family the members of which for more than two centuries back have been devoted to professional pursuits, especially Medicine and Law. The present Surgeon-General of the South-German Armies is a near cousin, and bears the same name, while the Minister of State, recently deceased, was also a cousin of the Doctor.

After having finished his preliminary education at the

Classical School (Gymnasium) in Darmstadt, Dr. Reuling entered the University of his State, Giessen, where he devoted two years to the study of natural sciences, especially chemistry, botany and zoology, under the celebrated Professors Von Liebig, Will, Leukhard, Hoffmann, and Kopp. At the end of the second year, Dr. Reuling passed his examination in natural philosophy (Philosophicum), which, in Germany, is the examination prior to the admission to the proper study of medicine. As the result of his examination was a brilliant one, Professor Phœbus, the authority in materia medica, offered to him the position of assistant, which was gladly accepted.

Dr. Reuling had charge of the botanical and pharmaceutical collections, and had an opportunity of doing a great amount of microscopical work, in which he gradually achieved such a reputation that a number of Universities in Germany, France and Russia procured collections of microscopical objects from the Doctor's hands. It was during this time that Dr. Reuling invented a microtome for botanical sections. This instrument has been described by Professor Phœbus in *Virchow's Annals.*

His position as assistant did not prevent him from devoting himself assiduously to the study of medicine, which he began by entering upon the study of anatomy and physiology, under the celebrated Professor Eckhard. After having pursued the above studies for one year, he was admitted to the so-called "Anatomicum," an examination which consists in the public demonstration of the self-prepared injected part of a subject, and also the public examination on any anatomical region the student may draw from a box of written questions.

After graduating in anatomy, Dr. Reuling entered the surgical clinic under Professor Wernher, and the pathological clinic under Professor Seitz, hearing lectures at the same time on surgical and pathological subjects, as well as midwifery, medical jurisprudence, psychiatrie, etc. After devoting three years to his clinical studies in surgery, pathology and midwifery, Dr. Reuling entered upon his last examination previous to his graduation as Doctor of Medicine. The

Fall vacations during these three years, which lasted three months (from July 1st to October 1st), Dr. Reuling spent at the celebrated Eye and Ear Hospital at Wiesbaden, under the well known Prof. Alexander Pagenstecher, a relative of the Doctor. He studied there the use of the ophthalmoscope with Dr. Hirschfeld, then first assistant at Wiesbaden, and now Professor of Ophthalmology at Charkow University in Russia. His instructor of pathologico-anatomical microscopy was Dr. Iwanoff, late Professor at the University of Kiewo, the greatest microscopist on eye-pathology in Europe, while Professor Pagenstecher and Dr. Zartmann, now of Metz, were instructing their student in therapeutic and operative ophthalmology. No wonder, therefore, that Dr. Reuling's knowledge of ophthalmology, at the time of his graduation, was far greater than that required of a graduate in general medicine.

The final examinations in medicine in Germany last several months, and include verbal as well as written questions on any subject pertaining to medical science. They are the most thorough and searching examinations in medicine in any country, and furnish, therefore, the greatest guarantee of the fitness of the young physician for his responsible calling.

Having successfully passed his final examinations, the Doctor prepared himself for his graduation as Doctor of Medicine. For this purpose he was required to write an inaugural dissertation, for which he had to make original investigations and literary research, his special subject being "A Case of Blood-Cyst in the Region of the Os Sacrum," which he had practically treated at the clinic of Professor Wernher. After the acceptance and publication of the dissertation by the University, Dr. Reuling was admitted to the public disputation, which in German Universities always precedes the confirming of the title of M. D. For this disputation, in which all the Professors of the University participate, the Doctor selected the following theses:

First. "The decapitation of the child by the ecraseur is that method which involves the least danger to the mother."

Second. "Pyæmia is septicæmia, with embolic processes."

Third. "The opinion of Devaine, that the bacteria in the blood are the carriers of a specific contagion, is only a hypothesis."

Fourth. "The public interest, as well as that of science, demands both the transformation of pharmacies into State institutions, and pharmacists into public officers."

Fifth. "Not the finer distinction of small objects, but the stereoscopical vision, marks the function of the macula lutea."

Sixth. "In mechanical obstruction of the otherwise intact ductus choledochus, the application of the induction current for the removal of the obstruction is indicated."

Seventh. "The waste in diabetes mellitus is caused by a transformation of the glycogenic substance into sugar."

After graduation, Dr. Reuling left the University, and entered the service of the Military Hospital in Darmstadt, from which, after a short stay, he entered a regiment as field surgeon, during the campaign of 1866. During the fall of the same year, the campaign was ended, and Dr. Reuling left the Army, and went to Vienna to study ophthalmology and otology under the renowned Professors Von Arlt, Von Jæger, Mauthner, Becker, Pollitzer, and Siegmund. While in Vienna, Dr. Reuling received a letter from Professor Pagenstecher, of Wiesbaden, at whose Institution the young physician had spent, for three successive years, his fall vacations, inviting him to the position of first assistant. The Doctor naturally accepted so flattering an offer, and left Vienna on February 1st for his new position. No better opportunity could have offered itself for the young specialist to gain a thorough knowledge of diagnosis, as well as treatment in practical ophthalmology, than at the Wiesbaden Eye Hospital, under Pagenstecher's excellent tuition and guidance. Dr. Reuling was afforded the opportunity of performing, in the presence of his superior surgeon, almost every operation known to eye surgery. While there, he came in personal contact with almost every celebrity in ophthalmology on the European continent.

During the Doctor's stay at Wiesbaden, Professor Pagenstecher was applied to by a prominent American merchant,

residing in Baltimore, for the recommendation of an experienced oculist, whom he could induce to select Baltimore as his professional field. The cause of this inquiry was a destructive eye disease of the merchant's daughter, whose case required constant observation and treatment.

Professor Pagenstecher informed Dr. Reuling that he had recommended him for this promising position in preference to any one else, as he considered him superior as an operator and diagnostician, and advised him, therefore, to utilize his spare time in spending a few months with Professor Von Graefe, in Berlin, and Professors Von Wecker and Liebreich, in Paris. After having followed the advice of his friend and instructor, and having enjoyed the most pleasant associations with these eminent specialists, Dr. Reuling left Paris in 1868 for Baltimore.

Having brought with him letters of the highest recommendation from Professor Von Graefe, of Berlin, to Professors Pancoast and Gross, of Philadelphia, and also letters from Dr. J. Marion Sims, of Paris, to Professors N. R. Smith and Nott, of Baltimore, as well as a number of most excellent testimonials from authorities like Von Arlt and Pollitzer, of Vienna, de Wecker and Liebreich, of Paris, and Pagenstecher, of Wiesbaden, his success in his new field of labor was soon established, especially as there was at this time no specialist in ophthalmology and otology in Baltimore.

Very soon after the practical labors of the Doctor began, he noticed the imperative necessity for the establishment of an infirmary for indigent eye and ear patients, and he therefore made representations to this effect to a number of prominent and charitable citizens, who kindly aided him in procuring a house, and opening, on October 1st, 1868, a well-appointed Eye and Ear Hospital, containing fifteen beds. During the first week, the applications for hospital accommodations were so numerous that every room was occupied while the dispensary department of the infirmary grew so large that the Doctor had to engage two assistants to aid him in his work.

As he had been appointed Professor of Eye and Ear Diseases

in the Washington University, this Dispensary afforded him excellent material for the clinical lectures which he held at the institution. At the end of the first year, nine hundred and fifty-seven patients, coming especially from Maryland and the Southern States, had been treated at the Maryland Eye and Ear Infirmary. The operation for cataract was performed eighty-eight times, and fourteen cases of glaucoma were operated on with good results.

The gentlemen most earnestly interested in the Infirmary, and constituting its Board of Directors, were William Chesnut, Christian Ax, B. F. Newcomer, Jacob Trust, William Wilkens, J. A. Nichols, J. J. Stewart, G. W. Gail and H. H. Graue. These gentlemen made representations to the City Council and State Legislature in regard to the maintenance of a number of free beds for the city and county poor. Their application having been granted, the institution was soon established upon a permanent basis.

The second year, the accommodations not proving sufficient, the Infirmary was removed to the large and commodious residence of Mr. Charles Carroll, No. 66 North Charles street, which was leased, and fitted up for the purpose.

During the fifteen years of the existence of the Infirmary, the number of patients treated amounted to thirty-two thousand, nine hundred and thirty-five. Almost every eye and ear affection known was treated by Dr. Reuling during this time, as the recently-published Infirmary report demonstrates.

Since the establishment of the institution, Dr. Reuling has more especially cultivated the extraction of senile cataract within the lenticular capsule, and has achieved by this operation such brilliant results, obtaining a perfectly clear and unobstructed pupil, after a most ready process of healing, that he has for the past few years generalized this method of cataract extraction, and applied it to almost all cases of senile cataract, much to his own satisfaction, as well as to that of his patients.

Another method of operation which has been more especially cultivated by Dr. Reuling is the myotomy of the orbicular palpebrarum muscle in cases of spasmodic contraction of the eyelids, either consequent upon ciliary irri-

tation, or in cases of spasmus nictitans. In several cases of protrusion of the eyeball, caused by sarcoma of the orbit, the enucleation of the tumor was accomplished without injury to the ball, so that almost normal vision and unobstructed movement of the eyeball was re-established.

The tattooing of the cornea with india-ink, by Wecker's instrument, in cases of dense central opacities, has been performed in twenty-seven cases. Several cases of partial staphyloma have been successfully treated by laying silver sutures around the protrusion.

Is cases of partial detachment of the retina, when neither hypodermic injections of pilocarpine nor the inunction treatment produced marked improvement, puncture of the retina was performed with excellent results in many cases, in some of which the eye was restored to its former usefulness.

The removal of particles of iron and steel from the interior of the eyeball, by Gruening's magnet, has been successfully performed in several cases, when no other method of operation could have saved the eye. The transplantation of a rabbit's conjunctiva into the human eye in two cases of extensive symblepharon was first performed in this country by Dr. Reuling.

Among the more important operations in ear cases, we mention trephining of the mastoid bone, the puncture and excision of the drum-head, the removal of a large enchondroma from the outer ear, and the healing of several cases of othæmatoma, by hypodermic injections of tincture of iodine, and pressure bandage.

Among his contributions to medical literature are the following. Von Graefe, *Balt. M. J. and Bull.*, Nov., 657, 1870; Hæmatoma, *Ibid.*, Feb., 1871; Absence of Both Irides, with Perfect Power of Accommodation, *Amer. J. M. Sci.*, N. S., Jan., 143, 1875; Diseases of the General Organism in their Relation to Vision, *Rd. and L. M. J.*, Aug., 1877; Case of Retro-bulbar Neuritis with only Quantitative Perception of Light, ending in Perfect Restoration of Vision, *N. Y. Med. J.*, XXVI, 393, 1877; Case of Blepharoplasty (with wood-cut), *Va. Med Monthly*, IV, 43, 1877; Glaucoma Malignum with

Illustrative Case (Mrs. Ruth), *N. Y. M. J.*, XXVII, 113, 1878; Extraction of Cataract within the Lenticular Capsule, *Ibid.*, XIX, 1–16, 1878; Yellow Oxide of Mercury in Eye Diseases, *Va. Med. Monthly*, V, 260, 1879; On Extraction of Cataract within the Capsule, Based on 200 Operations after this Method, *Trans. M. and Ch. Fac. Md.*, April, 181, 1880; Ruth *vs.* Reuling, *Report of Proceedings in the Case*, Balt., 1880, pp. 61; Importance of Expectative Surgery in Certain Injuries of the Eye, *South. Clinic.*, III, 13, 1880; Pseudo-Cyst of Retina Enclosing Foreign Body, *Arch. Ophthal.*, IX, 45, 1880; First Annual Report of the Md. Eye and Ear Infirm., Balt., 1870, Pp. 10; Detachment of the Choroid Coat after Extraction of Cataract, *Arch. of Ophthalmology*, 1868; The Transplanting of the Conjunctiva of the Rabbit into the Human Eye, *Va. Med. Monthly*; On a Blood Tumor of the Upper Lid, with Literature of Blood Tumors generally, *Md. Med. J.*, 1870; On the Organ of Hearing, (delivered before Md. Acad. Sciences,) Feb., 23, 1877; School Life and its Influence on Sight (Read before the Teacher's Ass. of Balt.,) 1878, Pp. 15; also in *Scientific Amer.*

Dr. Reuling is a member of the Heidelberg Ophthalmological Society, The Physiological Society of Girssen, The Medical Society of Paris, The Anthropological Society of Munich, the Microscopical Society of Baltimore, etc.

Of late, the Maryland Eye and Ear Infirmary has been divided into two departments,—the Maryland Eye and Ear Institute, located at No. 79, West Monument Street, for the treatment of private patients, and the Maryland Eye and Ear Infirmary, for the treatment of indigent patients, at No. 233, East Baltimore Street, which latter institution is connected with the Baltimore University, of which Dr. Reuling is Professor of Eye and Ear Surgery.

Among the more noted cases of Dr. Reuling who owe their eyesight or hearing to his operative treatment, we may mention the late Col. Wm. Chesnut of Baltimore, Hon. W. W. Corcoran, of Washington, Hon. Chas. Manly, former Governor of North Carolina, Joseph Jefferson, the well known actor, Rev. John McElroy, S. I., Rev. John Early former President of Georgetown College, Lady Thornton, the Marquis

de Noailles, Sterling Galt, Sen., Ulysses S. Grant, Jr., W. F. Ward, M. C., of Pennsylvania, Rev. Dr. Conrad, of the *Lutheran Observer*, Hon. Judge Gordon, of Cumberland, Md., John Donnan, Esq., of Petersburg, Va., Mrs. Jno. Marbury and Mrs. R. R. Chew, of Washington, John H. Brown, M. P., of Montreal, and Mr. Solomons, Mr. M. C. T. Wheat and Prof. E. Shephard, of Charleston, S. C., Mr. R. R. Bredgers, President N. C. R. R., Mr. London, of Wilmington, N. C., and Major Canedey, Seargent at Arms of U. S. Senate, Mr. W. F. Peterkin, of Richmond, and many others.

The gentlemen who have acted during these fifteen years as active and honorary Directors of the Maryland Eye and Ear Infirmary are as follows:

B. F. Newcomer, President Safe Deposit Co.; William Chesnut, wholesale grocer; Christian, A. & G. W. Gail, tobacco manufacturers; Hon. J. J. Stewart, Judge Court Alabama Claims; Johns Hopkins, capitalist, Wm. Wilkins, and H. H. Graue, manufacturers; Jacob Trust; J. A. Nichols, President Life Ins. Co; Frederick Raine, Consul General at Berlin; John B. Morris, President Bank of Baltimore; Hon. G. W. Dobbin, Judge Superior Court; Sam. M. Shoemaker, President Adams Express Co; W. F. Frick, Counsellor at Law; Hon. J. H. B. Latrobe, President Park Commission; J. Harmanues Fisher, banker; W. Prescott Smith, Manager B. O. R. R.; Hon. Chas. G. Kerr, States Attorney; C. Morton Stewart, shipping merchant; Dr. W. Chew van Bibber, Dr. James Cary Thomas, Dr. John Morris, Dr. J. L. Warfield, Rev. John McElroy, S. I; Rev. John Early, President Georgetown College; Admiral W. B. Shubrick, Hon. W. W. Corcoran, John Donnan, of Petersburg; E. O. Nolting, Richmond, Va; Hon. W. H. Battle, Raleigh. N. C.; R. R. Bridgers, Wilmington, N. C.; Hon. Carl Schurz, Missouri; Hon. Geo. P. Pendleton, Ohio; Joseph Jefferson, of N. J., and others.

The true use of porous plaster, according to a Milwaukee druggist, is "to retain the back in its proper place and let the pain crawl out through the holes."

ART. II.—**The Recent Epidemic at Plymouth, (Pa.), and the Lessons it Teaches.*** By WILLIAM H. COGGESHALL, M. D., Richmond, Va.

There is a great deal to be said on the subject of "Hygiene and Public Health," and especially on the advances made in this direction during the past few years; but when all is considered, a report embracing such advances would involve the recitation of many dry tables of statistics, and uninteresting descriptions of new inventions of a minor class. The many new inventions and revivals of half-forgotten means of antisepsis for the general public, to be used in the face of approaching zymotic disease, are hardly worthy of discussion, important though they be, simply for the reason that, as members of a profession which not only endeavors to cure disease, but which also exhausts its best measures to prevent it, we are all equally informed—whether dwellers in crowded cities, where the water supply may sometimes be looked upon with suspicion, or the peregrinations of the municipal garbage carts be watched with a careful eye; or residents of the country, where the hygiene of the home and family surroundings—so ably placed before our minds at the session of 1884, by one of the talented Fellows of the Society, Dr. R. I. Hicks—is so frequently and inconsiderately neglected.

Laying aside the matter I had collected for such a report as that referred to, it was natural to turn to that epidemic bugbear of our early Summer—Asiatic cholera; and, when it seemed probable that our fair land might be ravaged by the "black terror," it was almost a matter of necessity to read up as fully as possible on the subject, especially in reference to prophylaxis. I might have presented a paper—full and fairly complete, as far as our present knowledge goes—but the thought at once occurred to me, that if the fear of the ad-

*Dr. Coggeshall was to read the "Report on Advances in Hygiene and Public Health" during the late session of the Medical Society of Virginia. He died unexpectedly after a three days' illness, September 7th—just after he had finished the preparation of this paper, which by resolution of the Society, was read by the Secretary in its regular order during the afternoon of September 17th, 1885.

vance of the epidemic had caused me to post myself as thoroughly as could be done, under the circumstances, on this branch, it was decidedly more than probable that nearly if not quite every other Fellow of the Society had done the same, and consequently the reading of a paper devoted to that subject before you to-day, would be very much like "carrying coals to Newcastle."

One of the medical subjects of this year, relating both directly and indirectly to Hygiene and Public Health, which has attracted considerable attention from the profession, has been the Plymouth (Pa.) malady; and trusting that your thoughts have not been specially turned toward a study of this peculiar epidemic, I have taken some pains to secure a true history of the zymotic disease afflicting the town mentioned, and have drawn from it some conclusive lessons, which, though old, cannot be studied too often.

Two texts for my paper concerning the Plymouth epidemic, will present themselves at once to the mind of every man who has read the particulars of this continued fever, as follows:

"How great a matter a little fire kindleth."

"A little leaven leaveneth the whole lump."

If the members of one certain family in the Keystone State had been properly educated up to one of the lowest points in the knowledge of Hygiene and Public Health, at least three hundred persons resting in the quiet sleep of death, would, in all human probability, be now in the enjoyment of life and strength, and the five hundred who have recovered after passing almost through "the valley of the shadow of death," would have been spared the individual and family suffering they and theirs have undergone.

Plymouth is a large town, containing between nine and ten thousand inhabitants, situated in the Northeastern section of Pennsylvania, and deriving its financial life mainly from the mining region near which it is located, and secondarily from the surrounding farming country, which, owing to its mountainous nature, is not thickly settled. The town lies upon the west bank of the Susquehanna, about three miles below Wilkesbarre, the main street being parallel to the

river, the soil being an alluvial drift, and the greater portion of the inhabitants living upon the higher ground reaching up from the river bank to the near hills. The health of the citizens has been, until this year, as good as that of any residing in surrounding towns, and no special attention has ever been called to the sanitary condition of the place, until within a relatively recent period. Its sanitary position is extremely good, and comparatively little work would have been required to make it the peer in health of any city or town in Pennsylvania. It has, unfortunately, been blessed with that kind of near-sighted and slow-moving municipal officers so frequently found, not only in towns of its size, but also in those many times larger. Nearly all nationalities are represented in its population:—Welch, Poles, and Swedes, of the class of mine laborers, being especially numerous, and bringing with them from their native countries their natural habits of life and cleanliness, many of which are not by any means on a par with those of native born American citizens.

A sewage system has never been known in Plymouth—all town privies being of the old fashioned rural order, very few of them having even properly constructed vaults. The drainage of the town is into cesspools or garbage holes in places where the liquid refuse matter was not simply to pass along the streets by means of natural declivities. No organized attempt has ever been made, until recently, to cleanse the steeets, lots, or alleys, and every condition offering ready invitation to all zymotic diseases to enter and maintain a firm foothold in the town, has been exhibited in the past. Why the town has not been ravaged by diphtheria or typhoid fever every year before this, is an inexplicable mystery.

The water supply afforded the city is derived from two distinct sources; a private company, under the name of the "Plymouth Water Supply Co.," furnishing it to the citizens as follows:—

1. From a small mountain stream filling four storage reservoirs, thence supplying the pipes traversing the city; these reservoirs being from one-eighth to one-fourth of a mile apart; and—

2. From the Susquehanna river, whence water is pumped directly into the mains at the lower end of the town, when, in very dry or cold weather, the first-named source cannot be depended upon.

An artesian well, which reinforces the brook supply, furnishing 230.000 gallons of water daily, is not to be considered as a factor in the case of this epidemic.

On this mountain stream referred to—above either of the reservoirs—are only two houses from which drainage matter could possibly find its way to the water, one being situated near the bank of the lower storage point, and the other about forty feet from the stream, on a natural incline toward it, between the third and fourth reservoirs. This latter tenement proved to be the starting place of death's grim stride, in the following commonplace yet criminally careless manner.

The male adult occupant of this house paid a visit to Philadelphia during the Christmas holidays of last year, return-to his home the first week in January, 1885. Soon after his return, he was prostrated with a form of fever which was at first diagnosed by the medical attendant as of a malarial type; but before many days had passed, the physician and the consultant decided that the patient was suffering from a severe attack of typhoid fever. One of the prominent symptoms from that time on, was a persistent diarrhœa, and the fecal excretions, which were frequent and full, were deposited during the day in a privy which had no vault, but where the contents remained temporarily upon the surface of the ground distant from the stream between forty and fifty feet; and, during the night, were thrown out upon the snow, which was then two or three feet deep, at a point about twenty feet from the brook, where the bank was extremely precipitous. In the month of February the patient had several hæmorrhages of the bowels from extreme intestinal inflammation, during a relapse, and the blood and other matter then voided were deposited at or near the latter spot. No precautions whatever were taken toward disinfection of these excretory piles in either place.

These two piles of poisonous excreta remained frozen as

they were thrown, each pile daily having its bulk increased and with each succeeding storm having its snowy coverlet, thickened, the poison germs not being destroyed by freezing but simply remaining in a state of hibernation until the fatal day (which was, as nearly as can be now ascertained, the twenty-fifth of March,) was reached on the calendar. The sick man, lying on his cot in that humble dwelling, then little dreamed of the dreadful consequences which would ensue to the unsuspecting residents of the quiet hamlet below him from the criminal ignorance of those who had faithfully nursed him through his illness.

On or about March the 25th, one of the sudden thaws peculiar to the region and season occurred, accompanied by a severe rain storm, and together, these forces of nature deposited in the waters of the stream which furnished the water supply of Plymouth the dejecta of this typhoid fever patient, now by the lowered temperature softened, and in a condition to be readily changed from a harmless mass of frozen matter into an active poison, by the solvent power of the rapidly running current of pure mountain water. The germs of the disease of course soon found a place for growth and development in the system of every person who drank that water, where the proper favorable conditions existed; and after the usual incubatory period of from ten to fourteen days had elapsed, the "mysteroius Plymouth malady" (so-called) began to declare itself. The town, dirty in itself, offered a *nidus* for the fullest advancement of disease of this nature, and the personal and family habits of a majority of its inhabitants gave full scope for a display of deathly zymosis. The malady, then unnamed except as "mysterious," soon began its march through the borough, but like most epidemics of similar nature, it showed great favoritism. Notwithstanding the city's filthy condition, it only struck, at first, at the health and lives of those who were in the habit of using reservoir water alone for drinking purposes.

When the outbreak first occurred—between the tenth and fifteenth of April—between five hundred and eight hundred cases of this specific continued fever were noticed, but the Bureau of Vital Statistics of Plymouth being on a par with

its sanitary bureau, no definite figures can be given. Some authorities have placed the number at one thousand. Before the conclusion of the epidemic, over fifteen hundred persons had been attacked. At first no member of a family exhibited symptoms of the disease, except in such cases where reservoir water was used but before a month had passed, those drinking well water, who had before escaped, were here and there stricken down by the malady. Careful analysis showed that by this later time—the wells being very shallow, as "the town was honeycombed with mines"—the well water, previously polluted to some extent by town sewage, was now being rapidly poisoned to a still greater degree by the lack of precautionary care given to the evacuations—both peptic and rectal—of the numerous typhoid patients. Many who escaped disease and death early in the course of the epidemic, by means of the habitual use of well water, succumbed to the work of the destroyer after a sufficient number of people were sick in the town to cause carelessness in the daily deposition of house sewage. Wherever a family or number of families resided at a point where drainage from town privies could not percolate the soil around the well from which they procured their supply of potable water, they were as safe from the terrible consequences of this typhoid epidemic as if they were passing the summer at this beautiful health resort.* The condition of safety produced by the non-use of hydrant water was plainly shown at a portion of the borough known as "Broadway," where over forty families lived, who, not drinking this water, but being furnished with river water exclusively, passed quietly through the epidemic, and still possess "a local habitation and a name." In the village of Nanticoke, three or four miles below Plymouth, the villagers—drinking Susquehanna river water as in past years—suffered from their usual number of typhoid cases this season, and no more, no such thing as a typhoid epidemic being known in the town. On the upper side of Lee street in Plymouth, not one family wholly escaped sickness, because they employed hydrant water for

*Alleghany Springs, Va.

all house purposes, while on the opposite side of this same street—where nothing but well water was used—not one person was attacked until near the close of the epidemic, and then the few cases occurring were distinctly traceable to other causes than the drinking of water. A fact, not singular, but of considerable importance in the study of the etiology of zymotic diseases, was the following: In nearly all families supplied at their residences with well water, where cases of the fever did occur early in the course of the epidemic, it was found that those persons contracting it, had, to a greater or less degree, used reservoir water for drinking purposes at some place other than their own homes. These instances were not infrequent among the public school children especially who lived under such conditions. Even some few cases which were, toward the end of the epidemic, apparently idiopathic, were traceable to precisely such a cause, namely—the drinking of polluted water when calling, visiting, or engaged in some employment away from home. All individuals who confined themselves to the use of river water, and took ordinary sanitary care of the person, passed through the epidemic with perfect impunity.

So much doubt existed for some time after the outbreak as to the exact identity of the disease, on the part of the local profession, that on May 9th, Drs. French and Shakespeare, of Philadelphia, were called upon by the mayor of Plymouth to solve the mystery so far surrounding the malady. These gentlemen, by careful examinations—both ante- and post-mortem—decided the cases to be what we have called them in this paper—cases of genuine typhoid fever, and, after giving the proper authorities some evidently much-needed advice as to sanitation, treatment and prophylaxis, they returned home.

It was just at the time of their visit that the cause of the outbreak of the epidemic was discovered; but beyond that, they used their best endeavors to show the officials and citizens of the town how easily the disease might further spread through secondary infection unless proper preventive measures were adopted—a showing that was afterwards proven sadly true, by the remarkable neglect of the inhabitants to

properly disinfect the stools of patients in the town. The results of that neglect showed for themselves—to the disgrace of the citizens—the disease breaking out in new places for weeks afterwards. It is of course not to be supposed that all persons suffering from typhoid fever in Plymouth during the course of the epidemic received the poison germs into the system directly from the patient in the lonely dwelling on the hillside half a mile above the town, but the fact remains that within ten days nearly one thousand people who drank the water into which that patient's malignant dejecta were swept by storm and thaw suddenly developed pronounced cases of this specific fever. Probably most cases occurring after the first three or four weeks of the epidemic received the poison from their neighbors, owing to the strikingly unsanitary condition of the privies of the city—the infectious miasm from their contents polluting the air, or the parasitic organisms sinking through the soil into hitherto uncontaminated wells. Here therefore—outside of the question of disinfection—is to be noted the unintentional criminality of the officials of the city in not providing a properly constructed sewerage system, especially as the town was admirably located for such provision; and for this, as well as for other instances of municipal neglect, these same officials have been, according to newspaper report, indicted by the district grand jury. It might have a most pleasing and permanent effect on neighboring towns and cities if a number of Plymouth's Common Council were to spend a few months in jail society. The hint would probably be broad enough to be taken, and clean streets and an atmosphere reasonably free from poisonous microbes might follow as a direct result.

One cannot help but speculate on the "might have been." In this rushing nineteenth century, it is calculated that the life of every individual in normal condition above the age of fifteen years is worth to the State—in round numbers—one thousand dollars. Now, suppose the attending physician had early recognized the true character of the disease of that patient on the bank of the mountain creek, and, well knowing the possibility of danger to the borough below, had not only

ordered, but had seen carried out the systematic disinfection of that typhoid patient's dejecta? Simply taking a sordid view of the matter—what the French would call an "American" view of it—the result would have been a saving to Pennsylvania of nearly three hundred thousand dollars n human life alone!

But who can look upon the sentimental side of the epidemic and not feel shame and grief that proper methods of disinfection were not ordered and adopted? Children rendered orphans either wholly or in part; wives made widows; husbands losing that best friend of man—a wife; mothers left childless, and almost disbelieving that a Father ruled the universe; brothers and sisters finding no loving tie strong enough to hold each to the other on this earth; and all, why?

Because, as far as our feeble earthly science allows us to determine, one man did not order sulphate of iron, chloride of lime, hypochlorite of sodium, carbolic acid, or some such active agent, placed on and about the stools voided by one sick adult. What a terrible criticism this epidemic is on our boasted advancement in the knowledge of medical science!

It has seemed to me that this particular epidemic teaches a few important lessons, and they have presented themselves to my mind in the following order. Old though they may be, and often as they may have been taught us before, they are still worthy of remembrance.

1. That from an exceedingly small and apparently trivial source of infection, danger to a large number of persons may arise in the course of a zymotic disease.

2. That whatever doubt could previously exist in the mind of any member of the profession regarding the power of previously pure running water to become an active carrier of typhoid infective germs, has by this epidemic been entirely dissipated.

3. That the uncleanliness and non-sanitary condition of a town or city prolongs, in the direct ratio of its extent, the stay of an endemic or epidemic in such place.

4. That during a typhoid epidemic—and especially in its

early stages—cases of the disease may, and do occur, where the patient, having proper sanitation at home, receives the poison germs into the system by the simple imbibition of water containing such organisms elsewhere than at home, without his or her knowledge or suspicion.

5. That a town cannot afford to remain in an uncleansed condition, however remote danger from zymotic disease may otherwise appear, as such uncleanliness is a direct invitation to certain contagious and infectious diseases to establish a firm foothold in that place.

6. That a typhoid epidemic occurring in a city, once brought into existence from any cause, is easily enlarged and more fully developed by neglect of well-known and easily effected individual and municipal sanitary measures.

7. That the water supply of a town or city—notwithstanding the safeguards commonly thrown around it by the municipality—can easily be transformed, suddenly and unexpectedly, by contamination, into a poisonous condition for the uses of a community, from a source at once remote and individual.

8. That careful and thorough disinfection of the excreted matter—both liquid and solid—voided by a typhoid fever patient, is of the utmost importance to the health of the surrounding community, whether in city or country, but owing to lack of proper sewerage facilities, especially so in the latter.

9. That the physician practicing in a rural district which is in any manner, remotely or directly, connected with the water supply of a corporation, should exercise more than ordinary precaution to see that such water supply is placed in no danger of receiving contamination from his patients, either actively or indirectly.

10. That although it has been the custom in past years to look upon the water of city wells in general as far more liable to hold contamination from poisonous organisms than water furnished from reservoirs, yet the "Plymouth epidemic" has shown that a condition exactly the reverse may exist.

11. That to eliminate all possibility of poisoning in this manner, from sewage or excretory matter, either through

carelessness or ignorance, no human habitation should be allowed by law to exist near the source of a city's supply of drinking water.

These lessons have been learned by the profession over and over again, and too often, as in this particular instance, at a terrible cost of human life and suffering; but some of us still keep moving on in the old paths of carelessness and forgetfulness, and a lesson taught us this year by sad experience is often forgotten next year because of the daily occurrence of other events which carry the mind further and further away from the very matter which seemed at one time absolutely impossible to forget. These epidemics due to carelessness, will present themselves again and again, until a more general knowledge of the laws which govern the all-important subjects of hygiene and public health shall have been obtained outside of the profession. Perhaps even then human nature will require change to a higher plane before the individual will be at all times ready and willing to subserve his own work and interest to the general good.

However, the wisest thing to be done in the premises perhaps is, for us all to do our best to educate our patients in the knowledge of these primary laws of public health and hygiene, urging them to take a deeper interest in matters so closely relating to their lives and welfare, inducing them to make at least a casual study of hygienic questions, by means of the various excellent sanitary periodicals of the day—of which class of journals the *Sanitary Monitor*, of our own State, is no mean exemplar; and if by so doing, we fulfill our whole duty, a long step toward the prevention of such a condition of affairs as the sickness of one in seven in a city having a population of ten thousand, in the course of a zymotic disease, will be taken; for then the public generally, and especially the officials of a corporation, may have learned—and acted upon—the old axiom—"take care of the health-rate, and the death-rate will take care of itself."

Proceedings of Societies, Boards, etc.

MEDICAL SOCIETY OF VIRGINIA.

ALLEGHANY SPRINGS, MONTGOMERY CO., VA.,
September 15th, 1885.

The Sixteenth Annual Session convened in the Ball-Room of Alleghany Springs, Va., at 8 P. M., Tuesday. During the Session, which lasted until midnight of Thursday, the Fellows and Delegates in attendance were the guests of the generous and courteous Proprietor of this widely-known and popular Summer resort, Capt. C. A. Colhoun. His generosity extended so far as to allow half rates to the wives and children of Fellows of the Society. His attention to the wants of the guests was continuous, and his hospitalities were unbounded. From conversations with visitors from all parts of the United States who had spent the season at this renowned Water-cure, the reputation he made with his guests was but in keeping with the opinion of all who had enjoyed a visit to Alleghany Springs.

During the several days of the Session, 143 doctors were registered as in attendance. Drs. Archer Atkinson, of Baltimore, and J. S. Conrad, of St. Denis, were Delegates in attendance from the Medical and Chirurgical Faculty of Maryland, and Dr. Thomas R. Evans, of Mt. Carbon, from the Medical Society of West Virginia. Dr. Wm. G. Eggleston, of Chicago, Ill., who is one of the editorial staff of the *Journal of the American Medical Association*, and who is a Fellow of the Society, was also present. Honorary Fellow, Dr. George T. Harrison, of New York city, specially complimented the Society by attendance throughout the Session.

At 8 P. M., Tuesday, September 15th, about 100 Fellows and a house full of ladies and gentlemen filled the hall. The Recording Secretary, Dr. Landon B. Edwards, called the meeting to order, and announced that a railroad accident on the Norfolk and Western Railroad had prevented the arrival of the President, Dr. S. K. Jackson, of Norfolk, and that neither of the three Vice-Presidents were present. It was therefore in order to elect a President *pro tem.* Dr. W. D. Turner, of Fergusson's Wharf, Va., nominated Dr. Bedford Brown, of Alexandria, Va., who was elected by acclamation. He accepted the compliment, with a few explanatory remarks as to the absence of the President and Vice-Presidents, and assumed the chair.

After an address by Dr. Isaac White, Resident Physician at the Springs, extending a cordial welcome to all the guests, Dr. H. M. Clarkson, of New Market, Va, was introduced, who delivered the "Annual Address to the Public and Profession," selecting as his subject,

Medical Societies:—Their Relations to the Public.

He wished (1) to put under foot the popular prejudice that medical societies are not for public good, and (2) to submit suggestions how to make these societies more improving to the profession and more profitable to the public.

During the first five centuries of the Roman Republic, the opposition to the medical profession—especially to the Greek physicians then resident in Rome—culminated in the bitter prejudices of Cato, the Censor, and in the implacable persecutions of Pliny, the Elder. Ever since then, down to the present time, such prejudices have existed. These have arisen through misrepresentations and from want of proper information, and the public even now are inclined to judge of medical societies as mercenary in their motives and as on a par with butcher-clubs and trades-unions. Much of this popular odium is to be laid at the door of the profession. Some of the worst enemies of the profession are in the profession itself. Through malice against some, and to popularize themselves, they charge that medical societies are organized to institute a tyrannical tariff. "Fee bills, indeed! Why, gentlemen, we have none. True it is that in the experience of our infancy, we had some sort of a price-scale—a formidable-looking chart of figures and of foot-notes, a copy of which cannot now be found save in some cob-webbed pigeon-hole. Finding it impossible to get any one to stand up to its requirements, we have virtually abandoned it as impracticable, impolitic, and not even valid in law." Another prejudice exists against the profession because of the "Code of ethics." The Doctor then went into an explanation of some of the rules, justifying them by the light of experience, and showing that the "Code" is in reality a safeguard of the profession and of the people—that it is their protection against quackery and charlatanry generally. The great trouble is that the "Code" is not kept sufficiently inviolate by those who subscribe to it, and doctors do not let their patients know what this system of rules really teaches. Every section of it is based upon the moral law, and is full of Christian spirit. The objection that those who attend meetings are they "who have nothing else to do, but who love

to come together to hear themselves talk," was shown to be untrue and unfounded by the mention of names who have been the lights of the profession, each of whom was a warm advocate of medical societies, such as the Flints, the Atlees, the Sayres, the Grosses, Marion Sims, N. S. Davis, Battey and Campbell, of Georgia, Cabell and McGuire, of Virginia, etc. Other objectors in the profession ask, what can these societies teach us that we have not learned from other sources? "Ah, well, ye intellectual giants, ye wonderful Solomons! If ye will not come for your own sakes, come for ours. * * * Gladly will we sit at your feet, and drink of the fulness of your superior knowledge." "Your profession supports you; then you owe something to it."

Ignorance being the vapor upon which the monster, quackery, feeds, it is a duty of the profession to educate the public on medical topics. "Let lectures be given and papers written on these subjects, and publish them in popular form." We should teach the people hygiene, and insist upon legal enactments for the rigid enforcement of quarantine laws, etc." He urged members of societies to cultivate terseness and careful condensation of the thoughts they may wish to bring before the meetings. Let us discuss here the diagnoses and treatments of diseases that we are daily meeting with.

Dr. Isaac White, of Shawsville, Va., read a paper on the

Medical Virtues of Alleghany Springs Water.

He spoke of the geological formations of the section, which consist chiefly of magnesium, limestone, and comparatively a small quantity of argilaceous salts, and stated that the effects of baryta and strontia, which the water contains in solution, are somewhat similar to those of arsenic. He was not a believer in the "cure-all" properties of mineral waters, and thought that the extravagant assertions of some enthusiasts did much to rob mineral waters of their true rank. But he is satisfied that the range of the efficacy of the water of Alleghany Springs is distinct and extensive. Its value is specially well defined in dyspeptic cases—using the term dyspepsia in its generic sense. He believes the magnesian salts of these waters to be the one great source of their power. Frequently, when first freely taken, the water produces a strange sensation in the head—a feeling of giddiness sometimes accompanied or followed by a positive headache. He has also seen transient eczema and erythema follow its use, as also boils, after which the patient emerges

into the cheerful realm of health. The dose of the water is one glassful gradually increased to two glassfuls before each meal. The dose varies, however, according to the wish to secure its tonic, diuretic or cathartic effects.

Dr. Wm. C. Dabney, of Charlottesville, Va., as President of the Board, presented the

Report of the State Board of Medical Examiners,

which detailed the plan of its organization last November, and of its proceedings to date. Thirty-two applicants for licenses to practice have passed satisfactory examinations, and six have been rejected. One of the rejected has gone to practising in defiance of law, although the attention of both the Judge and the Commonwealth's Attorney of his county has been called to the matter. The Board are assured that he will be indicted at the next grand jury term of his County Court. It is proposed to take this case to the Court of Appeals, and there test the constitutionality of the Act establishing the Board. On the death of Dr. Thos. B. Ward, Dr. James Parrish, of Portsmouth, was nominated by the Executive Committee of the Society as his successor, but he has not been heard from. The recent death of Dr. F. D. Cunningham, and the resignation of Dr. O. A. Crenshaw, of the Third District, leave two vacancies to be filled by nominations during this session.

Dr. Joseph A. White, of Richmond, Chairman of the Committee appointed last year to confer with the professions of Virginia, West Virginia and North Carolina in regard to the organization of a Tri-State Medical Association, asked that the Committee be continued another year; and it was so voted.

Honorary Fellow, Dr. S. C. Gleaves, of Wytheville, as Chairman of the Necrological Committee, read memoirs of the following deceased Fellows: Drs. Geo. Wm. Pollard, Alex. Belfield, S. S. Keeling, W. P. Sebrell, P. K. Graybill, J. W. Craddock, Geo. E. Rives, Thos. B. Ward, Robert S. Payne, John Staige Davis, J. Alex. Waddell, and F. D. Cunningham. He stated that memoirs of other deceased Fellows would be forwarded to the Committee on Publications as fast as they could be prepared.

The report of the Executive Committee, Dr. W. W. Parker, of Richmond, Chairman, mentioned as the only duty performed, outside of routine work, the nomination of Dr. James Parrish to the Governor to fill the vacancy on the State Board of Medical Examiners occasioned by the death of Dr. T. B. Ward.

The report of the Publishing Committee—Dr. E. T. Robinson, of Richmond, Chairman—stated that 900 copies of *Transactions* of 1884 had been published at a cost of $263.75.

Messrs. J. W. Thomas, Jr., and C. A. Santos—both of Norfolk—were announced as present as Delegates from the Virginia Pharmaceutical Association, who were invited to seats with the Society.

The Secretary read a communication from Mr. T. Roberts Baker, of Richmond, Va., Corresponding Secretary of the Virginia State Pharmaceutical Association, enclosing a draft of a proposed Pharmacy law, asking the Society to pass suitable resolutions approving the said law, and urging the Legislature to pass the same. On motion, the communication was referred to a committee of five, with which Messrs. Thomas and Santos were requested to act in conference. The President *pro tem.* appointed Drs. J. Edgar Chancellor, of University of Virginia, W. D. Turner, Ferguson's Wharf, L. Ashton, of Falmouth, Alex. Harris, of Jeffersonton, and Wm. L. Robinson, of Danville.

SECOND DAY—*September 16th*—MORNING.

The Society was called to order at 10 A. M. by the President, Dr. S. K. Jackson. of Norfolk.

Dr. J. St. Pierre Gibson, of Staunton, Va., exhibited an *arm splint for extension in cases of fracture of the surgical neck of the humerus.* It is made of wire, covered by muslin, is simple in construction, can be made by any tinner in a few minutes, and can be adapted to either arm. He also exhibited a *modification of Sayre's apparatus for fracture of the clavicle*, and showed photographs illustrating the manner of its application. The modification consists principally in so arranging the apparatus as to use muslin principally instead of adhesive plaster, which is so disagreeable in hot weather. He also exhibited a *cervical uterine pessary*, somewhat like Hodge's closed horse-shoe pessary, made of copper wire, and the opening covered with a sheet of soft rubber. The idea is to so model it as to engage the cervix, so as to effectually prevent the tilting of the uterus backwards, forwards, or laterally. Each of these appliances was of his own invention.

Mr. J. W. Thomas, Jr., of Norfolk, President of the Virginia State Pharmaceutical Association, said that Mr. Santos and he were present to represent the Norfolk and Portsmouth Phamaceutical Society. Their Society, some months ago, issued a book of Non-Officinal Formulæ. The Virginia

State Pharmaceutical Association endorsed it, and that Association forwarded the plan for the endorsation of the Medical Society of Virginia. The serious disadvantages arising from the notorious multiplicity and want of uniformity of certain unofficinal medicinal preparations in general use, bearing the names of manufacturers whose formulæ are entirely unknown, has led to an earnest effort to remedy the evil by the adoption of a uniform set of formulæ, which is presented in the book. The medical fraternity is requested to abstain from designating the makers' name of any preparation for which a formula is found in this book. Then one may be sure to obtain uniform and reliable preparations—no matter where they may be dispensed. The elixir aurantii, U. S. P., is adopted as the body of nearly all the elixirs formulated. The preparation of Calasaya elixir from the fluid extract is more reliable and convenient than if made from the bark, owing to the variableness of the barks as found in commerce. All preparations containing strychnia hold one-sixty-fourth of a grain to each adult, etc. The exclamation point (!) is advised to be used in prescriptions, on the left of the articles ordered, as a caution sign to indicate the intentional prescribing of unusual size or frequency of dose.

On motion by Dr. Hunter McGuire, the subject was referred to the Committee appointed last night on the proposed Pharmacy Bill.

Vice-President, Dr. Benj. Blackford, of Lynchburg, Va., was called to the chair, and Dr. Samuel K. Jackson, of Norfolk, proceeded to deliver the *President's Address*, announcing as his subject,

The Science of Medicine:—Its Slow Rise; The Factors in its Recent High Development, and What is Necessary to Promote its Continued Growth.

He said he regarded his elevation to this position not so much a personal compliment as an expression of the appreciation of his work for the past four or five years, which had in view an attempt to interest the Society in zymotic diseases with special reference to prevention, rather than cure. But all germs and germ theories must be ignored on this occasion, in order to take a general survey of the work of the profession, so as to determine the most profitable way in which our labor can be employed. We must first take a retrospect to ascertain the hindrances to a rapid progress of the science of medicine; then consider the most important factors in its recent high development, and lastly, the most efficient agencies to invoke so as to secure its continued

growth. Among the hindrances has been the slow development of the collateral or fundamental sciences. The superstructure could not be reared until the foundation was laid. We should not be twitted for not understanding the chemistry of physiological progress before the science of chemistry had discerned it; rather blame the chemist. The same may be said of every other science upon which that of medicine is built. Our forefathers are not to be blamed that they did so little; we rather wonder that they did so much. When we consider their meagre stock of knowledge, we can but wonder at the great reputation they acquired. That Boerhaave's fame extended over the world is proved by the fact that a letter reached him, addressed by a Chinese Mandarin, "To the Illustrious Boerhaave, Physician in Europe." Evidently many facts which we now value were known to the ancients, having been discovered before the world was ripe for them. The comma bacillus is described in an old work published before the close of the last century. Milk diet—our favorite at present in kidney affections—was the chief reliance of the ancients. Transfusion of blood had gone out of date in the days of Erasmus Darwin. The doctrine of germs has been traced to Harvey. Dean Swift tells of a microscopist who discovered worms in the flesh of animals. Hahnemann knew of the existence of the itch insect, for he thought it was the sole cause of all diseases. Some one has unearthed a passage from M. Terentius Maro, who lived 2,000 years ago, which accounts for malarial fevers very much as we now do, and attributes them to the same cause. It is more than probable that but for the destruction of Babylon, and the burning of the Alexandrian library, we would find proof that the nations had made as great advances in the sciences as their monuments show them to have made in the arts. That even the Jews, whose opportunities for cultivating the sciences were less than the nations named, had made great progress, we infer from many passages in the Scriptures. Moses was said to be learned in all the wisdom of the Egyptians, and his wonderful hygienic laws are monuments to that learning. They are abreast of, if not in advance of, modern sanitary science. That they were not inspired is proved by the Talmud, which never was claimed to be inspired, and which contains directions and suggestions which could not have been made without a knowledge of some facts which we suppose to be developed by modern research. The edifice reared by Moses remains standing to this day. It has beheld centuries defile before

it; it has defied the assaults of time. Dr. Jackson closed with a number of suggestions which he thought it well for the Society to act upon.

After a recess of five minutes, the subject for general discussion,

Scarlet Fever,

was opened by a full paper by Dr. Thomas J. Moore, of Richmond. He adopted the usual divisions, such as scarlatina simplex, scarlatina anginosa, and scarlatina maligna. He gave graphic descriptions of each form, and traced the history of the disease from its earliest mention down to the present day. He discussed the origin of the fever, and laid much stress upon the germ theory. The success in cultivating and inoculating the special microbes of charbon, chicken cholera, murrain and other diseases in the lower animals, with modifications of symptoms and abatement in the severity of the respective diseases were described, and the hope expressed that corresponding advances in human *parasitology* may follow close in their wake. He stated that up to this time the only germ that has filled all the necessary requirements, as found in man through inoculation and otherwise, is the spiro-bacterium of relapsing fever found by Obermeier, and called after him. The parallelism between small pox and charbon was spoken of, travelling, however, in contrary directions; the one from man to the lower animals, the other from the domestic animals to man; the special bacillus of the latter had been discovered; through cultivation and inoculation it fulfilled all that the law required of it. Like vaccination in small-pox, it produced, through inoculation of a remote culture from the virus of one of the lower animals, immunity in the human family. The peculiar microbe producing the former has not yet been determined. He hoped that it would come to light at a day not distant. Continuing, he stated there are two microbes described as giving origin to scarlatina, the monas scarlatinosum of Klebs, and the plax scindens of Eklund, of Stockholm. Each is ingeniously and plausibly put forward as the true bacillus. Klebs does not indulge in the enthusiasm peculiar to confidence, while Eklund endeavors to demonstrate the absolutism of his proposition. Dr. Moore declared that he did not believe that the special microbe producing this disease had yet been recognized, and the question, to say the least of it, was undetermined and open.

The part of the address in regard to treatment was long and exhaustive. He carefully discussed the merits of bella-

donna, cited the opinion of the homœopaths who had introduced it in this disease, as carrying out the very essence of their doctrine, with that of the regulars who had partially or completely accepted it. Dr. Moore does not think that belladonna possesses prophylactic powers, and declared it to be an indifferent drug when used to mitigate symptoms during the progress of the disease. For the reduction of temperature he preferred the ice cap to the head, rubber bag over the front of the neck and covering the great vessels, conjoined with sponging. Failing in this, he uses the wet sheet, then the cold pack, and, as a last resort, the cold bath, as described by Ziemssen. He never fears the depressing effects of cold water, as patients can always be relieved from impending congestion by free resort to alcoholic stimulation. His favorite internal antipyretic up to this time was quinine, administered by rectum or hypodermatically, where the stomach was irritable. He hoped much from resorcin, and urged his brethren to try it, and give their clinical experience to the world; the drug is safe, certain in action, a germ destroyer. As an unguent, especially where itching and burning are prominent symptoms, he knows nothing equal to a combination of glycerin, borax, and carbolic acid, in the proportion of ℥j, ℥j, and 15 gtt., respectively; both the borax and acid obtund nervous sensibility. He commended the use of unguents generally; they calm the patient and reduce temperature. He recommended sprays as the most efficacious manner of applying internal medication to the throat, and called especial attention to the value of hydrate of chloral, 2 to 4 grains to the ounce, as invaluable for its antiseptic and anodyne powers. This drug is likewise invaluable, he declared, in convulsions happening in children. It is best administered per rectum. Dr. Moore recommended the use of small doses of mercury for a few days as an adjuvant to diuresis in the dropsy attending acute desquamative nephritis, where diuretics were not accomplishing the desired end. Failing in these, a resort to hydragogue cathartics is indispensable. Jaborandi he had not tried in this fever; he feared its depressing effects; the physiological action of the drug is easy to induce, but difficult to leave off when desired. Nutritious food from the commencement of the attack, and free stimulation in all cases where the vital powers are depressed, he regarded as indispensable.

Second Day—Afternoon.

Immediately upon the President's call of the meeting to

order at 3½ P. M., Dr. Hunter McGuire, of Richmond, Va., was requested to make some remarks on two of the many cases which had been brought to the Springs to consult him.

Case I was a male child seven years of age that he had seen before. It illustrates well what he has always maintained, that *coxalgia and spondylitis are not necessarily dependent upon traumatism or any form of injury* for development. Here is a child whose father died of tuberculosis. The mother, who is present, has always said and still repeats that she knows the child has never had an injury of any kind sufficient to attract her attention, and she has had him under continuous supervision all of his life—being more than ordinarily maternally watchful of him because he was a delicate child from his birth. About three or four years ago, the patient was brought to Richmond and placed under Dr. McGuire's care. He then had coxalgia, well advanced, for which he was treated. Afterwards amyloid disease of the liver set in, and progressed so as to distend the abdomen enormously; but under treatment by bichloride of mercury, the hepatic condition has greatly improved, the abdomen is much smaller, the size of the liver much diminished, and the symptoms in this respect are all better—as bad off as he is now. But while this little sufferer has been mostly in bed and kept quiet for the past four or five years, although a tonic course of treatment has all along been kept up, he is brought here to-day with very decided development of Pott's disease of the 7th and 8th dorsal vertebræ. The most searching scrutiny of the personal history reduces us to the necessity of attributing this case of coxalgia and of spondylitis—not to any manner of external injury, but to inherited tendency to disease—to what might be called a spontaneous development of these diseases. It shows us that our fathers were not wrong in saying that hip-joint disease and Pott's disease are not necessarily dependent upon injury.

Case II is that of Dr. Jerry Farmer—a Fellow of this Society. He was a healthy man until about ten months ago, when a horse kicked him in the ileo-cœcal region. A small lump, with throbbing pain in it soon developed. This mass does not materially distend the abdominal wall. By percussion it is found to be about the size of a man's two fists, and, by grasping, its surface is found to be smooth, and its attachments are so firm as not to allow of motion. It is evidently attached to the iliac vessels, as they pass into the thigh, as well as to the bowels in that region. This lump is not ordinarily painful to the touch, although at times he suffers ex-

cruciating throbbing pains, beginning in its centre and soon radiating all through it and down the thigh of the right side. Firm, steady pressure upon the tumor sometimes relieves the pain for a while. His general health is much impaired because of the injury to the nervous system which the pain has caused. His bowels are constipated. He has not the cancerous cachexia, nor are the pains of that sharp lancinating character that indicate cancer. Several able doctors in attendance and elsewhere have examined him, and some of them have thought they could find fluctuation, as if a fluid of some kind were in the centre of the tumor, but Dr. McGuire could not detect it. He thinks the case most probably one of sarcoma, and advises against a surgical operation. It is not cancer—although a disease nearly as bad. But to test whether or not there be matter in the tumor, a small aspiratory needle of sufficient length might be inserted, and if pus or other removable fluid be in it, then a cutting operation might be justifiable, although because of the locality of the tumor and its evident extensive and intimate attachments, as a result of inflammation, to the large blood-vessels, nerves, intestines, etc., the result of an operation for extirpation would be almost certainly fatal. This is one of the rare cases in which morphine eating might possibly be said to be justifiable so as to make life tolerable.

The remainder of the afternoon session was devoted the

Election of Officers, etc.,

with the following result:

President.—Dr. Rawley W. Martin, of Chatham.

Vice-Presidents.—Drs. John S. Apperson, of Town House; T. B. Greer, of Rocky Mount, and H. M. D. Martin, of Fredericksburg.

Recording Secretary.—Dr. Landon B. Edwards, of Richmond.

Corresponding Secretary.—Dr. John F. Winn, of Richmond.

Treasurer.—Dr. R. T. Styll, of Richmond.

Dr. Hugh T. Nelson, of Charlottesville, to deliver *Address to Public and Profession*, 1886.

Subject for General Discussion, 1886.—"Puerperal Septicæmia."

Leader in the Discussion.—Dr. Lawrence Ashton, of Falmouth, Va.

Nominated for the Governor's Approval as One of the Examiners at Large on the State Board of Medical Examiners, (to fill the unexpired term of Dr. F. D. Cunningham, deceased)—Dr. Thomas J. Moore, of Richmond.

Nominated for the Governor's Approval on the State Board of Medical Examiners from Second District, (to fill the unexpired term of Dr. T. B. Ward, deceased).—Dr. Meade C. Kemper, of Norfolk.

Nominated for the Governor's Approval on the State Board of Medical Examiners from Third District, (to fill the unexpired term of Dr. O. A. Crenshaw, resigned).—Dr. Hugh M. Taylor, Richmond.

Place and Time of Next Meeting.—Fredericksburg, some time about November 1st, 1886, according to announcement by Executive Committee.

Night Session.

As soon as the President had called the meeting to order, Dr. L. Lankford, of Bowers', moved that the suggestions contained in the "President's Address," delivered this morning, be referred to a committee of three Fellows for consideration and report to this Society. Carried.

Drs. Lankford, Bedford Brown and H. M. Clarkson were appointed.

Scarlet Fever Discussion.

Dr. Bedford Brown, of Alexandria, read a paper on scarlet fever, in continuance of the morning's discussion. He has seen malignant cases with cold extremities and tongue, with a body temperature of 107°. He uses

℞.—Acid. salicylat ..... ℥ij.
Tinct. aconit. radicis.....gtt. xij.
Infus. digitalis.....℥iss.
Spts. ammon. aromat.....℥iij.
Syrup. aurant. cort.....℥ss.
Aquæ .....℥j.—M.

S. Teaspoonful for a child five years old every three hours.

This combination reduces fever more decidedly than any other antipyretic he has used; it acts also as a diaphoretic and diuretic. A tepid bath or a wet pack increases its action. Alcoholic stimulants benefit malignant cases tending to collapse and coma, and also cases, on the other hand, having high fever, rapid pulse, and extreme restlessness. Such agents also generally arrest adenitis. In dangerous cases, frequent baths are too exhaustive. When extensive suppuration and pyæmia threaten, muriated tincture of iron, Fowler's solution, and quinia sulphate act well. To arrest acute nephritis and renal dropsy, envelop the body with a flaxseed meal poultice, covered with oil silk. When the kidneys are

engorged, the urine bloody, with dropsy of the chest and abdomen, a full dose of calomel, followed by compound powder of jalap will often do good. Such cases bear purgation. But if the renal dropsy is attended with cool skin, great pallor, feeble pulse, and great prostration, then frequent purging is not well borne. In such cases, use lumbar poultices, digitalis, acetate of potash with occasional saline cathartics. A morbid element in scarlatina often develops rheumatism; hence the frequent cardiac complications. When these occur, resort to the active agents named in the above prescription. Alkalies and salines should be used for renal complications. Dr. Brown has been disappointed in the diaphoretic action of pilocarpin. Potassium iodide is often useful in nephritic sequelæ of scarlet fever.

Dr. R. I. Hicks, of Casanova, has never seen anything indicating relationship between scarlet fever and diphtheria, nor has he seen scarlatinal sore throat threaten life. Mopping the throat, or gargling hot water will relieve the faucial troubles. He thinks the best treatment of scarlet fever consists in cold sponging the body, and the use of quinine and small doses of carbolate of iodine internally. Everything about the patient should be kept clean, and a current of fresh air should be kept up about the bed. Pull the bed out in the middle of the room—away from the corners—and keep the windows open. When the weather is very cold, use open fireplace rooms. Malignancy depends upon bad sanitation. Zymotic germs do not live in pure air. Filth breeds them. Soda salicylate irritates the stomach too much, and corrosive sublimate, in doses large enough to kill germs, will kill the patient.

Dr. Alex. Harris, of Jeffersonton, emphasized the benefit (1) of isolation, both to prevent and to cure scarlet fever; (2) sick-rooms with open fireplaces; (3) the bed should be out from any corner of the room, and draughts of fresh air should be made to keep the room ventilated; (4) the patient's and the bed-clothing should be changed daily; (5) the popular disinfectants are not useful in permissible doses. Fire and water above 212° F. are the best germicides. Hence, burn or boil all clothing that has been about the patient; (6) always disinfect a house in which a zymotic disease has been treated, if even a year or two previously. Pour boiling water over the floors, in the cracks, on the wall, etc. Steam would be better.

Dr. C. T. Lewis, of Clifton Forge, believes in the stimulating plan of treatment, and thinks digitalis helps to relieve

the swelling of the throat. Sometimes he uses chlorate of potash and muriated tincture of iron. He is a strong advocate of such sanitary measures as Drs. Hicks and Harris had just mentioned. He feeds liberally.

Dr. John F. Winn, of Richmond, Va., thought, respecting the sanitary care of scarlet fever, the following additional precautions should be scrupulously observed:

(1) For the more effectual isolation of the patient, the attending physician should see to it that plain and distinct placards with the words "Scarlet Fever" in large letters are placed upon the front of the house, and all persons should be forbidden to enter except those actually needed to care for the patient.

(2) In the absence of a law prohibiting public funerals in all cases of contagious disease, whether such funeral services be at the house or the church, it is the duty of every physician to enlighten his people respecting their danger, and should use every legitimate method to discourage such custom.

(3) Disinfection.—Great care should be exercised in selecting a good disinfectant. There is a popular idea that copperas is a disinfectant. It is an antiseptic, but not a germicide.

Fire stands at the head of all disinfectants. All discharges from the patient's throat and nose should be received upon old rags and immediately thrown into the fire. If there is no fire in the room they should be thoroughly saturated with the chloride of lime solution or the corrosive sublimate solution named below, and then conveyed to the fire in another part of the house.

Disinfection of the Person.—Occasional ablutions of the patient's body with Labarraque's solution diluted with 20 parts of water have been highly recommended.

After Death, the body should be thoroughly washed with, and afterwards wrapped in a sheet saturated with one of the following solutions, recommended by the Committee on Disinfectants of the American Public Health Association, viz.:

(*a*) Chloride of lime, four ounces to the gallon.

(*b*) Corrosive sublimate and permanganate of potash in the proportion of two drachms of each salt to the gallon.

Disinfection of Clothing.—All clothing removed from the patient should be immediately immersed in boiling water, or allowed to soak for two hours in the chloride of lime solution diluted with 9 parts of water; or in a corrosive sublimate solution of the strength of 15 grains to the gallon of water.

Disinfection of the Sick-Room.—This cannot be effectually done while occupied by the patient. No method of disinfection is equal to thorough ventilation. After the recovery or death of the patient, the room being vacated, all the windows and doors tightly closed, the apartment should be subjected to the fumes of burning sulphur for at least twenty-four hours, using not less than from two to four pounds of sulphur, over which a small quantity of alcohol has been poured to insure its combustion after the fire has been applied.

Dr. L. Lankford, of Bowers, Va., agreed with the speakers as to the importance of fresh air in the treatment of scarlet fever, and thinks that malignancy would be rare if this were insisted on more than it is. As an illustration, he mentioned the cases of two of his children. The younger was kept downstairs in a warm room with the doors closed, and malignancy developed; the other child was kept upstairs, where there was no fire and where a window was kept open, and no malignant sign or symptom developed. The weather was cold.

Dr. J. Herbert Claiborne, of Petersburg, spoke of a case in his practice in which the dermic inflammation was so intense that, on the third day, the skin came off in large patches all over the body. Some children played day after day in the room with the patient, and yet none of them contracted the disease. Shortly afterward some other children had the fever so mildly that they could not be retained in the house; but in a short while, the fever developed in some of their playmates. An old lady living in the house with these mild cases had scarlet fever so severely that she came near dying. To disinfect a sick-room, not only the organic germs must be destroyed, but the spores also. A solution of corrosive sublimate (1 : 1000) is required to kill the spores, or water at 280°. But the best disinfectant for a sick-room after all is pure, fresh air. The doors and windows should be left open. Of course, always disinfect articles of clothing, etc. He thinks Squibb's solution of chlorinated soda—℥ij to the gallon of water—is the most efficient insecticide in the market, and it is cheap enough to be within the reach of all.

Dr. Wm. L. Robinson, of Danville, believes a great deal of good results from proper medicinal treatment. He brings down the fever by using a full bath at 95°, which he allows to cool down to 85° while the patient is in it. Before taking him out of the bath, give a weak toddy and rub the body over with camphorated oil before he is put to bed. He depends very much upon the free use of lithia water as a drink.

If the nose gets stopped up, so as to compel mouth breathing, the child often wakes up from cat naps screaming. For this condition he uses a solution of two grains of chloral hydrate in an ounce of water with the steam atomizer. This keeps the nose moist. Large doses of calomel and jalap should be used if kidney complications threaten. In one case of œdema of the lungs, the hypodermatic use of pilocarpin cured the patient.

Dr. W. W. Parker, of Richmond, has often been disheartened at the results of treatment. Many cases get well without any special treatment, but until recently he did not get good results under any plan. Now, however, he has better results. The best remedy for malignant scarlet fever is alcohol in free doses. He keeps his patients hot. He got the suggestion from the good effects of alcohol in typhoid fever. Applications of turpentine are as good for the sore throat as carbolic acid. Keep the child in the house—in Summer, about ten days; in Winter, wait about three or four weeks.

Dr. M. A. Wilson, of New River Depot, has used, with great satisfaction, Bartholow's tincture of belladonna prescription to antagonize that condition of the throat which causes exudation.

Dr. Hugh T. Nelson, of Charlottesville, said patients often succumb to accumulations of heat around the nerve centres; hence the necessity for diaphoretics and heart stimulants. After these, use tonics.

Dr. S. K. Jackson, of Norfolk; Dr. Robert S. Lewis, of Culpepper; Dr. Wm. L. Broaddus, of Newtown; Dr. John Grammer, of Halifax Court House; and Dr. W. D. Cooper, of Morrisville, all spoke in the highest terms of praise of Watson's chlorine treatment, as described in his work on *Practice of Physic.*

Dr. M. G. Ellzey, of Washington, D. C., then presented his paper on

Chemistry, Materia Medica, and Therapeutics.

In reference to the advances made during the past year in materia medica and therapeutics, he thought all interest centred around *antipyrin* and *cocaine*—the two drugs most frequently mentioned by professional writers in the last twelve months. He thought the former had not realized the great hope induced at its introduction, namely, that we had a safe and reliable antipyretic. It had not only in frequent instances reduced the temperature of the sick body without changing in any manner the force of the fever ill-

ness, but its administration had at times been attended with alarming results to the patient. Its value had proved by no means as great as was at first announced, and its true place in our armamentarium can hardly yet be assigned. Cocaine has proved of wonderful power in some directions, but is not the general mucous anæsthetic that is claimed for it by a few enthusiasts. Dr. Ellzey is fully of the opinion that protective inoculation by attenuated choleraic virus is by no means operative. He shares the general opinion that the subject is one hardly worthy of discussion. He thinks Dr. Sternberg's researches are of more than ordinary value to the profession, and advised all physicians interested in the "germ theory" to follow up his studies. He advised more thorough study of the climatological peculiarities of Appalachian Virginia by the practitioners of the State. He thought that region a vast Summer sanitarium.

Dr. Smelt W. Dickinson, of Marion, Va., read the

Report on Advances in Obstetrics and Diseases of Women and Children.

Antiseptic midwifery, he said, has undoubtedly saved many lives. But some of the antiseptic practices of a year ago have been done away with as being either useless or harmful—such, for instance, as routine vaginal and intra-uterine injections after labor. Mercuric bichloride is dangerous in such injections; especially is it to be omitted when there is nephritis. Lying in rooms should be aseptic, and whatever is to go into the vagina—such as hands, sponges, instruments—should be made scrupulously clean. Among other prophylactic methods, Cushing's was described. Thoroughly bathe the parts, and then douche the vagina before delivery with weak solutions of corrosive sublimate, and after delivery of the placenta, wash out the uterus with a like solution. The doctor's and the nurse's hands should be kept aseptic all the time.

Post-partum drainage is readily effected by letting the patient sit up on the night-vessel when she wishes to urinate, etc., provided, of course, her condition otherwise permits it.

The contagium of puerperal fever must be of a material character, capable of being either destroyed or washed away by antiseptic injections. If body temperature rises materially above 100° after labor, with no other cause, and the discharges become offensive, use antiseptic washes at once. A doctor may return to his general practice after he has thoroughly used antiseptic washes and other precautions.

Extra-uterine pregnancy is now treated by killing the fœtus by electricity and then by laparotomy.

Combined version in placenta prævia is done thus: Tampon the vagina until made sufficiently dilatable. Then anæsthetize the patient and remove the tampon. Introduce the hand and carry two fingers through the presenting placenta and draw the fœtus to one side, while the other hand on the abdomen presses so as to carry the buttocks down until a foot can be reached. Draw the foot through the cervix so that the breech may act as a tampon on the lower segment of the uterus. Then wait for the spontaneous expulsion of the child, or for sufficient dilatability of the cervix to permit delivery.

Dr. Christopher Tompkins, of Richmond, in the treatment of the cord, recommends that it be drawn between the fingers until some of the gelatinous matter is expressed, and then tie as usual, except to apply a third ligature near the one left on the umbilical end of the cord. Crede and Weber prefer absorbent cotton as a dressing for the cord, to prevent umbilical inflammation.

Abortion is approved when dangerous conditions call for it. The lying-in room should have a regulated temperature. Swinging as a substitute for artificial respiration is urged by some.

Of diseases of women, neurasthenia is the most prominent. Nervous disease is often taken for uterine disease. According to Mitchell, neurasthenia is generally associated with anæmia, and is chiefly reflex in its manifestations. Rest, massage, electricity, and forced feeding are the essentials of treatment.

Lacerations of the cervix uteri will usually heal of themselves if blood poisoning is prevented. If operation should be required, relieve the cellulitis first.

Alexander's operation for backward uterine displacements consists in cutting down to the external inguinal ring, gathering up the ends of the round ligaments, and drawing them sufficiently out to replace the womb in its proper position. Then stitch the ligaments to the edge of the ring and cut off about an inch of the end. Drawing too much on the ligament has caused death. Wear a suitable pessary for two months. Prolapse of both ovaries into Douglas' cul-de-sac, with consequent sterility, may be cured by this operation.

Dr. Goodell advises rapid dilatation of the cervix for dysmenorrhœa instead of incision, especially for organic dysmenorrhœa, and also for nervous dysmenorrhœa.

In diseases of children, the use of large doses of carbonate of ammonia for scarlet fever is gaining favor. Dr. R. D. Huffard, of Smythe Co., uses the carbonate later in the disease, when the capillary circulation is languid. Bismuth subnitrate is good for the sore tongue, which usually occurs about the fifth day, as it is, also, in cancrum oris. Trypsin is a solvent for diphtheritic membrane when used as a spray every fifteen minutes or so, if the patient's strength will allow. Avoid chlorate of potash in febrile affections where the blood is alkaline, as in diphtheria, nephritic diseases with scanty urine, uræmia, etc. Icterus neonatorum is said to be due to incomplete closure of the ductus venosus. Dr. Hartigan, of Washington, D. C., supports Sims' theory as to the cause of trismus nascentium being "an inward displacement of the occipital bone."

THIRD DAY—*Sept. 17th*—MORNING.

After the President called the meeting to order—about 10 o'clock—the Treasurer, Dr. Richard T. Styll, of Richmond, presented his annual report, showing a balance on hand of $390.55, after the payment of all indebtedness.

On presentation by Dr. W. W. Parker, of Richmond, it was

"*Resolved*, That the Treasurer be authorized to put the bills past due the Society by delinquent Fellows (as published in the *Transactions* of 1884, on page 224), into the hands of an active collector, with instructions to collect by compromise or otherwise, as the Treasurer may direct."

Because of the threat made by a gentleman, who had come before the State Board of Medical Examiners for examination, and whose examination papers did not reach the standard required for the issue of a license to practise medicine in Virginia, to test the constitutionality of the Act of the General Assembly of Virginia of 1883–4, establishing said Board of Examiners, it was, on presentation by Dr. Landon B. Edwards,

"*Resolved*, That, in the event suit or other process at law is brought against the State Board of Medical Examiners touching its authority to act according to the provisions of the Act of the General Assembly of Virginia of 1883–4, establishing said Board, and defining its powers, the Executive Committee, during the vacation of the Society, shall have authority to engage legal assistance for the Attorney-General, and to call upon the Treasurer for a sum not exceeding one hundred dollars to defray expenses that may be thus incurred."

Dr. W. D. Turner, as Secretary of the Committee appointed Tuesday night to confer with the Delegates from the Virginia State Pharmaceutical Association with reference to a proposed bill to Regulate the Practice of Pharmacy, reported that the Committee recommends the endorsement of the said Bill by the Medical Society of Virginia, and suggests that a Committee of three Fellows be appointed to act with the Committee of the Virginia Pharmaceutical Association to secure the passage of such a bill by the Legislature. The report was received and adopted.

"The [same] Committee appointed to consider the Formulary offered by the Virginia Pharmaceutical Association wish to express their appreciation of the motive indicated in adopting a universal standard and strength of medicines, and suggest that the Virginia Pharmaceutical Association place this formulæ in the hands of all druggists, and call attention of the medical men in their respective sections to the fact." The report was received and adopted.

On motion by Dr. Alex. Harris, thanks were cordially voted Col. C. A. Colhoun for his great courtesies shown the Society.

Dr. Bedford Brown, of Alexandria, under call for scientific reports, etc., read a paper on

Pathology and Successful Treatment of Lacerations of the Os Uteri, Without Surgical Operation.

Emmet's operation, he said, is more or less hazardous in some cases, and there are many sufferers who cannot enjoy its benefits because either of remoteness from a surgeon, or expense, etc. During the past ten or eleven years he has perfected a plan of local treatment, which has not failed of success, and no contraction of the cervical canal has ever resulted. After describing the rational signs of laceration and fissure of the cervix uteri, as also the physical signs, he mentions some of the more common results. If the laceration fails to heal primarily by first intention, it must be made to heal by second intention. The two leading principles to be kept in view are (1) absolute cleanliness by means of disinfection, and (2) stimulation of a new action in the vital functions of the part. Dr. Brown applies, in these cases, solutions of crystals of nitrate of silver graduated so as to adapt their strength to the condition of the parts. Solution No. I contains

℞. Argenti nitrat. (cryst.).....ʒss
Aquæ distillat.....ʒj.—M.

This is to be applied alone to the diseased cervical canal

by the means of a flexible silver or whalebone probe, wrapped with absorbent cotton down to the internal os and beyond, if the fissure extends that far.

Solution No. II contains

℞. Argenti nitrat. (cryst.).....ʒiiss
Aquæ distillat.....ʒj.—M.

To be applied with a camel's hair brush only to the external surface of the cervix, the lacerations and granulations, until the surface has a thick white coating, which protects the granulations for two or three days. After the mucous surface has healed over, if there remains any induration and hyperplasia, use solution No. III, which contains

℞. Argenti nitrat. (cryst.).....ʒij
Aquæ distillat.....ʒj.—M.

This acts as a potent stimulant of the absorbent functions, and, with time, invariably reduces the hypertrophy and induration. Dr. Brown has fairly tested such agents as Churchill's tincture of iodine, Battey's preparation of iodine and carbolic acid, pure carbolic acid, chromic acid, tannin and glycerin, iodoform, solid stick of nitrate of silver, etc., but they have all acted totally different from the crystals of nitrate of silver in solution. The solution acts as a soothing agent on the super-sensitive nerve extremities. Localized cellulitis and subinvolution do not contra-indicate its use. This method of treatment may be begun at any time after two months after labor. The paper then gives three illustrative cases, and concludes by advising the use of solution No. I for concealed fissures of the mucous membrane of the cervical canal.

Honorary Fellow, Dr. George T. Harrison, of New York City, read a paper on

Puerperal Septicæmia—Especially with Regard to Etiology and Prophylaxis.

Due credit is given to Semmelweiss for his masterly work, and for demonstrating that not a single case of puerperal fever originates except by the absorption of a decomposed animal organic matter; and that this matter, in the majority of cases, comes from without, and that only in the minority of cases does this matter originate within the individual attacked. Puerperal septicæmia, then, is simply and solely a septic infection, starting from a wounded surface existing at some point along the genital tract; and in every woman who has just been confined, fresh wounds can be demonstrated. In puerperal fever, the carriers of infection are either the

pathogenous fungi, which generate traumatic diphtheritis, pyæmia and septicæmia, or putrefactive germs, which are ubiquitous. The pathogenous fungi are convyed to the puerperal genitals by the hand of the obstetrician or his coat or shirt sleeves, or those of the nurse, by instruments used in obstetric examinations and manipulations, sponges, etc. These pathogenous fungi are derived from suppurating surgical wounds, or wounds in which processes are taking place attended by putrefactive decomposition, cadaveric poison and especially the lochial discharges of women who are subjects of septic infection. A minimum quantity infects in the most effectual manner. During an epidemic, the lochial discharges of puerperal sick are so infectious that they endanger life by infection of non-puerperal women, of the pregnant, of physicians, and of gynæcological cases where operations have been performed. These pathogenous fungi find in the puerperal woman the conditions most favorable for their rapid development, and for the display of their vital activities. Contrary to common opinion, there is no connection between puerperal sepsis and erysipelas. Pathogenous fungi affect the organism immediately, while the putrefactive germs do so indirectly.

Prophylactic treatment against puerperal septicæmia consists in pure atmosphere for the lying-in chamber, care not to allow any infectious matter enter the genital passages, and when this cannot be avoided, thorough disinfection of the genital tract. The doctor's and the nurse's hands and instruments should be made aseptic. Use soap on the hands freely, and cleanse under the finger nails thoroughly with a nail-brush. Wash the hands then with soap and water, and resort to the nail brush again and again. The doctor should take off his coat and roll up his shirt sleeves to the elbows. Dip the hands and forearms into an antiseptic solution—such as of carbolic acid. Instruments should be treated pretty much in the same way. They should stand in boiling water for five or six minutes before using. During the latter part of pregnancy, the patient should bathe frequently, and the external genitals should be bathed with a boracic acid solution. Dr. Harrison advises ordinarily against antiseptic vaginal injections when labor sets in, as both unnecessary and fraught with danger. They remove the mucus which softens the vagina and makes it unctuous. But if the patient has been subjected to septic infection during the birth, then such injections would be eminently proper—notwithstanding the fact that their use in normal labor may evoke a rise of

the morbility and mortality. Such injections during or after labor should be made by the obstetrician. If putrefactive decomposition of the uterine secretions sets in before the birth, complete the labor as speedily as possible, and then thoroughly disinfect the entire genital tract by intra-uterine injections of carbolic acid or mercuric bichloride solutions. All lacerations of the parts should be immediately closed with the continuous suture of catgut under strict antiseptic precautions. Iodoform dusted over the raw surfaces favors rapid primary union. Crede's method of delivering the placenta has a prophylactic value.

The paper on *Infanticide*, by Dr. Chas. R. Cullen, of Hanover county (P. O., Richmond, Va.), was read by title and referred to the Committee on Publications. The paper was taken up mostly with a showing of the defects of the Virginia laws relating to the subject.

The Report on Advances in Surgery

was read by the Reporter, Dr. H. Grey Latham, of Lynchburg, Va. The report commenced with a resumé of the discussion before the late session of the American Surgical Association on the *Field and Limitation of the Operative Surgery of the Human Brain*. It notes that the latest advices are unfavorable to extirpation of the larynx and trachea. Drainage of gangrene of the lung and the like was approved. *Laparotomies* are now common for all sorts of purposes—for gunshot wounds of the abdomen, for excisions of organs and parts not essential to life, for intestinal obstructions, etc. For *strangulated hernia*, *intussusceptions*, *etc.*, opium, belladonna, enemata, etc., are useful for a short period only. Do not wait too long before operating. As soon as vomiting sets in, operate. Nothing less than mechanical measures can then afford relief. Cut down immediately for the cæcum, since that is the best directing point from which to search for the strangulation. If the cæcum is distended, the cause of the obstruction is below; if collapsed or not tense, then the cause is above. If the bowel is gangrenous, resect the knuckle and establish an artificial anus. When laparotomy cannot be resorted to, adopt Nélaton's enterotomy—performing it in the right iliac fossa. The best guide to the seat of an obstruction is not manual exploration, but visual examination assisted by extrusion of bowel. No case of operation for intestinal obstruction is properly concluded until overdistended bowels are relieved of their contents. The invagination method of *treating hernia* is now neglected, and

obliteration of the sac or closing the neck by sutures and torsion adopted.

Digital dilatation of the pylorus has been practiced for chronic non-malignant stricture. Through an incision in the stomach, introduce the fingers and forcibly distend the stricture. The following are tolerably reliable guides as to operative treatment of *rectal cancer:*—(1) Do not operate if the finger cannot pass beyond the disease, unless it is confined to the posterior wall. (2) When confined to the posterior wall, the growth can be removed at somewhat greater height. (3) If the bowels are movable on the adjacent structures, the cancer is limited to the rectal walls, and is suitable for operation. But if the bowel feels hard, rigid, and firmly bound to the surrounding organs, the case is unsuited to operation. (4) Always examine the abdominal viscera, and if secondary deposits occur in the liver, etc., do not operate.

The Report on Advances in Practice of Medicine,

owing to the absence of Dr. Rives Tatum, of Harrisonburg, Va., Reporter, was read by title, and referred to the Publishing Committee. The status of the comma bacillus theory, as related to cholera, was mentioned, and inoculation disapproved because of its fatality. The belief in the unity of scrofula and tuberculosis seems to have gained ground. Dr. Kalb's *treatment of typhoid fever* by alcohol and calomel and opium in pills was thought worthy of mention. Dr. Jackson's ammonia plan meets with the approval of Dr. Tatum. The *mercurial treatment of diphtheria* is gaining ground. Dr. Nunn, of Savannah, Ga., uses the biniodide internally and externally. We are learning to look upon *peritonitis as a symptom*, and not as a disease in itself. It is claimed that about 85 per cent. of cases of *locomotor ataxia* are of syphilitic origin, and hence curable. Some of the many uses of *cocaine* are alluded to. *Ptomaines* are described. Freund says sugar is in the blood of carcinomatous patients, and *peptones in sarcomatous.* The recent *picric acid test for albumen* is liable to error. Dr. Flint, Jr., advises the use of *arsenite of bromine in diabetes*, and anti-diabetic diet.

Dr. R. C. Powell, of Alexandria, Va., forwarded a paper, entitled,

Clinical Notes on Carcinomatous Affections of the Digestive Organs—The Unreliability of Gastric Symptoms as Evidences of Gastric Pathology.

After a clinical description of cancer, he gives six illus-

trative cases involving some part of the digestive track. The cases illustrate (1) the unreliability of gastric symptoms in their diagnosis, and (2) the great value of cachexia as corroborative evidence of malignant disease. Dr. Powell thinks it of more pathognomonic importance than the presence of a tumor. Since there is no specific, the objects of treatment are to sustain strength and relieve pain. If the cancer affect the stomach, it is worse than useless to fill that viscus with meat, meat-extracts, eggs, and other nitrogenized principles; but rather give fats, sugars, and starchy matters which are digested chiefly in the intestines. If the pancreas is the seat of disease, then give meats, albumen, milk, etc., but let all food be pancreatinized before it is used. If the liver is diseased, allow both fresh flesh and fish, but not salted nor highly seasoned. Allow fruit and vegetables. Permit "amusement without excitement, exercise without fatigue, and nutrition without stimulation,"—especially in hepatic cancers. Morphia should be given to relieve pain. Arsenic, corrosive sublimate, carbolic acid, tincture of iodine, etc., are the agents mostly used in cancer. Bismuth combined with atropia often allays salivation of gastric cancer. Cundurango and Chian turpentine have passed into oblivion, to be soon followed by alveloz.

Dr. M. A. Rust, Richmond, Va., read a lengthy, but highly interesting and instructive, paper, entitled,

Remarks on the Etiology of Zymotic Diseases.

These "remarks" form the introductory part to other papers on this subject, which will follow. He first reviews the evolutionary history of the bacteria, from their discovery by Lewenbeck (1682) to the present day. The germ theory is shown to be evolved from the fermentation theory—the marked process of zymotic diseases being (since the early part of this century) regarded as analogous to fermentation, the contagium playing the part of the leaven. By the adoption of Liebig's brilliant molecular (physico-chemical) fermentation theory, the explanation of the morbid process of zymotic diseases assumed a more plausible and apparently more scientific aspect. When the *yeast plant*, which, since its first discovery by Lewenbeck had been repeatedly discovered, forgotten, and re-discovered, was finally universally recognized as the causative agency of all fermentative process, the medical mind, dropping Liebig's theory, came to the conclusion that if the active principle of fermentation be a *living* organism, the contagium of zymotic diseases must

also be *living* matter. Thus the germ theory was ready to spring into life. Its way could never have been paved by practical medicine, clinical observation, etc., unaided by biology. The path-finders were eminent botanists, biologists, etc., who, by their researches and experimental studies concerning the etiology of certain epidemic diseases amongst plants, disclosed, in every instance, as uncontrovertible primary cause of the disease, the action of some low form of life. It then stood clear before the minds of the young medical generation that similar organisms must also be found as primary cause of the infectious diseases of mammalia—man included. And they were found.

Dr. Rust then gives a summary of the discoveries, hitherto made, of the various species of pathogenic microbes, distinguishing between those which are confirmed and those which still await confirmation,—and thinks that the rapid progress made within the last decennium justifies the expectation that all remaining obscurities as to the relations between microbes and diseases will soon be elucidated, and that we shall either have to drop the term "zymotic disease," or extend it over a much greater number of diseases.

After this, however, there still remains three perplexing questions:

1. Whence come the numerous varieties of pathogenic microbes?

2. How does the morbid process of bacterial diseases ever come to a happy termination?

3. How is immunity effected, especially through vaccination?

In discussing these questions, Dr. Rust deals with possibilities, probabilities and inferences,—a comprehensive reasoning which does not bear epitomizing. There appears in the foreground the conclusion, based on a chain of reasoning, that in infectious diseases we always have to reckon with two facts: the cellular resisting power, on the one hand, and the degree of virulence and the *numerosity* of the invading microbes on the other, and that *infection or immunity*, *abortive or fully-developed form of the disease*, *recovery or death* will depend upon the correlation of these two factors.

Dr. M. L. James, of Richmond, Va., forwarded a paper on

Dyspepsia, with Neurasthemia and Somnolence.

He announced his purpose to be brief and practical, and to speak only from his personal observations.

The morbid condition was the association of dyspepsia and neurasthenia with an oppressive drowsiness, or an irresistible tendency to sleep, occurring chiefly after meals and especially the principal meal of the day, so as often to amount to a serious inconvenience and sometimes a grave disability. He spoke of neurasthenia and somnolence as sometimes the result of dyspepsia alone—the dyspepsia, besides interferring with the nutrition of the nervous tissues, sometimes seeming to produce what might be described as a certain species of shock on the nervous system. Most frequently, however, other agencies contributed to the asthenia, and sometimes several. Among the most frequent were excesses in study, in labor and in watchings, the undue loss of sleep and the strain of responsibility. Frequently, however, excessive stimulation contributed to the establishment of this morbid condition—not only that resulting from alcohol, but also from the excessive use of tea and coffee, opium, tobacco and chloral. Excessive venery, and especially abuse of the generative organs by masturbation, was also a frequent agency. Sometimes excessive discharges contributed to the result. He instanced as an illustration of this morbid association the case of a merchant under his observation, who under the depressing influence exerted on the nervous system would sometimes, while surrounded by business proceedings of intense interest, be so overwhelmed by oppressive stupor as to become entirely indifferent to the surroundings of his position, and if unable to withdraw from his store, would sink down under such circumstances into a slumber so profound as to make him entirely unconscious of what was transpiring.

He said that the conditions of neurasthenia and dyspepsia reacted injuriously upon each other; that while many cases of indigestion occasioned depression of the nervous forces, the existence of neurasthenia intensified the dyspepsia; that although digestion was a chemical process capable of being accomplished in the retorts of the laboratory, it was at the same time intensely vital, and the want of a proper supply of the forces of innervation would very much aggravate the trouble of dyspepsia, and that in the treatment of this morbid concatenation, each condition should have reference to

the other. The integrity of each condition should be maintained to secure relief to the other.

One of the considerations he mentioned as important in the management of this morbid association was to secure, during each night, an ample amount of refreshing sleep, to provide a proper innervation for the next day's digestive effort. He also emphasized the importance of the selection of such articles of food which would at the same time secure the easiest digestion and the most perfect nutrition, and should be limited to such amounts as are susceptible of a complete and early solution, and that, with other elements of nutrition, due regard should be taken to supply an adequate amount of the phosphates. The phosphates of food ordinarily are the best of the vitalized phosphates. Care should be taken to place the patient in the most favorable circumstances for effecting digestion, and for that reason, there should be scrupulous care against intense physical or mental exercises, and particularly mental; and to that end, the avoidance especially of reading and writing, and the effort of public discourse. Digestion should not be interferred with by habits which would lower the forces of digestion, such as the use of a large amount of ice-cold drinks. There should be ample time for the digestion of each successive meal before other food was ingested. He indicated as a very important measure in the regimen desirable in this condition, a period of rest in the recumbent position before dinner, that meal usually occasioning most of difficulty—such an act securing increased nutrition to the nervous tissues and the special recuperation resulting from sleep. He indicated, however, that it was a matter of great importance to resist the depressing influence occurring after the meal, which might be to a considerable extent accomplished by passive exercise in the form of carriage or horseback riding, and pleasant mental occupation—especially such as would come from social intercourse.

As to medication, he suggested the use of the digestive ferments—pepsin, pancreatine and ingluvin, as seemed to be suited to the case; and, without entering into the particular treatment which the different forms of dyspepsia required, which was not allowable by the limits of the paper, he said that it should in all cases be a matter of careful consideration with the physician that the particular forms of dyspepsia—for example, the fermentative forms, indigestion of albuminous matters or of fatty matters—should be regarded in each case, and appropriate measures should be employed

for the relief of each particular form. He suggested that benefit would often be derived from a judicious use of alcoholic stimulants at meals. Those stimulants, however, being in every case strictly limited within the point of their stimulating tendencies, and not allowed to the extent of their sedative effects. He spoke of caffeine as being an agent which would relieve this oppression of the nervous system for an occasion or two, but was too purely a stimulant to be of permanent benefit. Instead of being taken in amounts to be highly stimulating, it might be associated with tonic doses of such agents as quinine, strychnia and phosphoric acid, which gave permanancy of tone to the digestive organs and contributed nutrition to the nervous tissues. He indicated the following formula as one he had frequently used, which, if associated with a proper maintenance of the regimen that has been indicated, with the very best results in the relief of this morbid association :

℞. Quiniæ phosphat.....gr. xxxij
Strychniæ phosphat.....gr. ½
Acid phosphorici (50 per cent.)..min. xl
Caffein. citrat.....gr. xxxij
Aquæ puræ.....f. ℥xiv
Glycerinæ puræ.....
Spts. vini rectificat, ā ā.....f. ℥j
Tinct. cardamomi comp.....f. ℥ij

Misce secundem artem.

Sig.—One or two teaspoonfuls immediately before or after breakfast and dinner.

He referred to those extreme cases where the disorder of the stomach was such that the patient could not ingest the foods ordinarily in use, and for those cases he indicated the use of such fluid diet as Valentine's Beef Juice, or foods predigested by the use of pancreatine and pepsin; and in those cases attended by such aggravation that the stomach would tolerate no food at all by articles similar to these, alimentation should be maintained through the rectum.

Afternoon—Third Day.

When the meeting was called to order, at 3 P. M., the "Report on Advances in Hygiene and Public Health" was called for. The Secretary stated that the Reporter, Dr. Wm. H. Coggeshall, died on September 7th, just after he had finished preparing his paper on *Lessons Taught by the Recent Plymouth* [Pa.] *Epidemic*, and that the paper was on the Secretary's table. On motion of Dr. J. Edgar Chan-

cellor, Dr. L. B. Edwards was requested to read it, which he did. [We publish it in full as Article II in this number of the *Medical Monthly*—the last, but about the best, contribution of his several valuable ones to the literature of the profession.]

Dr. Jackson, the retiring President, was elected an Honorary Fellow of the Society; and the President elect, Dr. Rawley W. Martin, of Chatham, Pittsylvania county, was inducted into the office.

Dr. J. Edgar Chancellor, of University of Virginia, read a paper on *Cremation*, in which the early history of the procedure was given, descriptions of the operation detailed, its utility shown—both from a sanitary and from a sentimental standpoint—and its more general adoption urged upon the attention of the profession and people. A full synopsis of the paper is published in the *Sanitary Monitor* for October, 1885.

Dr. Philip Taylor, of Richmond, Reporter on

Advances in Ophthalmology and Otology,

read a full report, noticing (1) *Jequirity*, the proper and careful use of which in trachoma with pannus has become established practice. A daily fresh solution alone of about 5 per cent. strength should be employed. It should not be used if chronic purulent conjunctivitis is present. (2) *Sympathetic ophthalmia* is now popularly regarded as septic inflammation that extends through the inter-vaginal lymph space of the optic nerve. Dr. Theobald, of Baltimore, still thinks it a reflex neurosis. (3) *Hydrochlorate of cocaine* abolishes reflex excitability, and hence is anæsthetic, and acting as a vaso-contractor, it diminishes hæmorrhage. (4) *Prince's operation for pterygium* consists in tearing the growth from the corneal surface by a suitable hook. Dr. Prince reports twelve cases—each one successful. (5) *Evisceratio bulbi* is now the substitute for enucleation. Remove the cornea and contents of the scleral cavity, and then draw the wound together by the tobacco-pouch suture. The resulting stump gives the artificial eye greater motion, and the cosmic effect is better. (6) *Transplantation of conjunctiva of rabbit* to the human eye is a recognized operation. (7) *Transplantation of cornea* has been only partially successful. Dr. Taylor also mentioned Agnew's operation for dislocated lens, and Seeley's conclusions as to the operative treatment for strabismus internus.

In Otology, *hydrogen peroxide for otorrhœa* is recom-

mended. Begin with a six per cent. solution once or twice daily, and increase gradually to twelve per cent. A four per cent. solution is especially suggested for naso-pharyngeal catarrh. *Calomel for otorrhœa* as a local application, after the canal is thoroughly cleansed, is also highly recommended. *Boro-glyceride*, in from ten to fifty per cent. solutions in glycerine, is very useful in purulent ear troubles. The ear syringe is being supplanted by the *dry method*, which consists in using a bit of absorbent cotton on a probe. Never resort to this plan, however, without a strong reflected light from the surgeon's head mirror. Dr. Eitelberg, of Vienna, has introduced *bougies for opening the Eustachain tubes.* Care is required for their use. The *Eustachain catheter* is now made of soft rubber fitted by a straight style. Remove the style on reaching the pharyngeal wall. It has the advantage of passing through obstructed nostrils. Dr. Burnett thinks solutions of *brucia* nitrate or sulphate act better than four per cent. solutions of cocaine for ear pains. The sympathetic relation of the teeth and ear troubles was alluded to.

Dr. Joseph A. White, Senior Surgeon of the Richmond Eye, Ear and Throat Infirmary, read a paper, entitled

Practical Remarks and Suggestions in regard to Diseases of the Ear, Throat and Nose, with a Few Cases in Point.

After referring to the common errors in regard to diagnosis of these diseases, he entered into a consideration of the relation of ear troubles to general medicine, to menstruation, etc. The treatment of acute inflammation of the ear, and of chronic discharges, was fully described. For acute pain in the ear, he recommended cocaine (twenty per cent. solution) with atropia locally. In regard to the anæsthetizing effects of a strong solution of cocaine on the drumhead, his experience is entirely satisfactory—contrary to the experience of some other observers. In exemplification of the disastrous effects of neglected otorrhœa, he reported a typical case with a fatal termination, notwithstanding the temporary favorable results from drilling the mastoid.

The use and abuse of the *aural syringe* was fully discussed and instances mentioned where forcible injections with the syringe had caused rupture of the drum-head, violent middle ear inflammation, and irreparable damage to the hearing. He cautioned, therefore, against its promiscuous use.

In regard to the *tonsils* and their diseases, he called attention to the common erroneous impressions about them, referred to the confounding follicular tonsillitis with catarrhal diphtheria, to which many a diphtheritic scare is to be

attributed, and to which, also, is due the idea of the abortive efficacy of nitrate of silver in diphtheria. Hypertrophy of the tonsils results from repeated attacks of tonsillitis, and also is a frequent accompaniment of hypertrophic catarrh; but from whatever cause, the tonsils should always be removed, especially if they interfere with nasal respiration or articulation. In fact, anything that interferes with free nasal respiration should always be removed or shrunken because nasal stenosis — even partial—has so many unfortunate sequelæ, among which are mouth-breathing, deafness, etc., and sometimes it plays an important *rolê* in the production of the so-called reflex neuroses of the nose, notably asthma, cough, headache, hay fever, etc. His paper closed with a report of the successful treatment of two typical cases of hay-fever by the use of the galvano-cautery. One was Rev. Wm. C. Williams, of Atlanta, Ga., aged 67, who was a victim for sixteen years. He was brought to him by Dr. McGuire, July 10th. His attacks began about August 20th of each year, and lasted about six weeks. His only relief was annual visits to Bethlehem, in the White Mountains. Dr. White found stenosis of right nostril, slight tubinated hypertrophy and swelling of the mucosa on both sides of the vomer. He cauterized the irritable spots with the galvano-cautery, and relieved him so that he has not suffered this year. The other case was the present Secretary of the Commonwealth, who had hay-fever for eight consecutive years—always coming on on August 13th and lasting till frost. He had partial nasal stenosis, hypertrophy of turbinated bones and swelling over vomer. Dr. White cauterized the sensitive parts on August 3rd. On August 24th he had not had an attack. On September 10th he had still not had an attack; but finding a few irritable points, these were cauterized. In both cases, 10 and 20 per cent. solutions of cocaine were used as a local anæsthetic with the result of totally preventing any pain from the applications of the cautery in the first case, while there was partial loss of sensibility in the second.

Dr. Charles M. Shields, of Richmond, read a

Report of Cases of Tracheotomy in Lupus of the Larynx and in Diphtheria.

After alluding to the extreme rarity of lupus of the larynx, he related the case of a retired doctor, aged 55, who presented himself for examination with the following symptoms: loss of voice, some pain in swallowing, and some dyspnœa. The laryngoscope showed a congested and swollen condition of the whole larynx. The site of the left vocal cord was

filled with a growth covered with small tuberculous-looking elevations, having between them superficial ulcerations. He had never had syphilis, and there was no family history of cancer or phthisis, and besides, the latter was excluded by the absence of its physical signs. Thus the three causes of laryngeal ulceration—syphilis, carcinoma and phthisis—were excluded. He was put on iodide of potash and cod liver oil, and iodoform was applied locally with an insufflator. This was followed by no improvement, and six months later the appearance of the larynx was much worse. Nine months afterwards, both sides of the larynx were so covered with these tuberculous growths and ulcerations as to render the cords indistinguishable, and no glottic aperture was visible. His dyspnœa was so great that tracheotomy was necessary. The operation was followed by great relief, and he left the hospital one month afterwards breathing with ease and being able to remove, cleanse and put back the entire tube. When heard from the following summer he was doing well. The operation was designed simply to prolong life, and it was, of course, necessary for the patient to wear the tube permanently.

Dr. Shields also reported a successful case of tracheotomy for laryngeal diphtheria. The patient was a little girl aged three years. The case was at first supposed to be one of catarrhal laryngitis. She had fever, great hoarseness and dyspnœa. On the fourth day, however, diphtheritic patches appeared on the pharynx and enabled the diagnosis of diphtheria to be made. Iron, quinine and chlorate of potash were prescribed, and the room kept filled with the vapor of lime. The patches on the pharynx were touched with a solution of carbolic acid in glycerin and disappeared in thirty-six hours. The dyspnœa grew rapidly worse, however, and on the sixth day of attack the child was cyanosed and the sternum was indrawn with each respiration. Tracheotomy was performed and a silver canula introduced. Just at this time breathing ceased entirely and recourse to artificial respiration was had. The tube was removed, and a piece of membrane was noticed at the lower angle of the wound, which, on being withdrawn, proved to be a perfect cast of the trachea extending nearly to the bifurcation. The tube was again introduced and the child did well. The lips of the wound became covered with diphtheritic membrane. The tracheotomy tube had to be kept in nearly three weeks before perfectly satisfactory respiration could be carried on through the natural channel. The child made a good recovery.

Under call for voluntary scientific papers, Dr. L. Ashton, of Falmouth, Va., read a paper entitled:

A Plea for Tracheotomy in Croup.

The operation itself should be placed among the minor surgical operations, so as to popularize it, and thus save life by encouraging timely resort to it. Tracheotomy requires coolness and caution on the part of the surgeon. Trousseau says that the operation "is more delicate than difficult." Bretonneau does not speak of it as dangerous. West says that, in itself it "is not attended by serious hazard." Dr. Mastin does not consider it as surrounded by any "particular danger." Do not, therefore, alarm the patient's friends by speaking of it as a last hope or a final resource. The isthmus of the thyroid gland even has been divided with impunity. When it has been decided that a positive obstruction to the entrance of air to the lungs exists, do not delay in removing it. Do not let secondary complications occur. In the majority of cases of croup, the patient dies for want of oxygen and from consequent exhaustion of the nervous forces. The earlier the operation is performed, the greater are the chances of success. When the disease is steadily progressing, and is unaffected by medical treatment, tracheotomize. When retraction of the epigastrium and intercostal spaces develop, and supra-clavicular depression occurs during respiration, with or without cyanosis, *any* delay is dangerous. "It is a clinical fact that in a large number of cases, the extension of the disease is arrested by the operation." Besides, the admission of air into the lungs through an artificial opening in the windpipe secures entire rest for the diseased larynx, and this leads to a suspension of diseased action there. Further, the diphtheritic process itself stops at the level of the vocal cords much more commonly than is generally supposed. Tracheotomy does not add one element of danger to the original disease. Even operate though the child may have ceased to breathe, if life is not extinct, and perform artificial respiration, for many children have been saved under such circumstances.

Dr. R. I. Hicks offered the following resolutions, which were adopted:

WHEREAS, "The State Board of Health is the legitimate offspring of the State Medical Society, and whereas its efficiency and value depend upon the support and aid of the profession represented by this Society;" therefore,

Resolved, 1st. That the President of the State Board of

Health be authorized and requested to appoint a health officer in every county, whose duties shall be—

(1) To co-operate with, and aid said Board in all matters pertaining to State hygiene.

(2) To secure the co-operation and aid of every licensed physician in his county in obtaining a record of the prevailing diseases (endemic and epidemic) in his county; number of cases, number of deaths, together with such other facts in the history, treatment, etc., as may be of general interest, and to report the same annually to the State Board of Health.

Resolved, 2d. That these several reports be arranged and tabulated by, or under the direction of the State Board of Health and presented in annual report to this Society at its next annual meeting.

Resolved, 3d. That the President of the Board of Health be requested to make these appointments at once (with our Society's Secretary's aid), and forward to each one so appointed a copy of these resolutions.

Honorary Fellow, Dr. J. Edgar Chancellor, of University of Virginia, offered the following resolution, which was adopted:

WHEREAS, Dr. Isaac White, of Shawsville, Va., for seventeen years Resident Physician to the Alleghany Springs, having furnished to this Society by request a report of the therapeutic virtues of these waters—so long and favorably known to the profession and public of the United States,

Resolved, That we feel justified, by Dr. White's long experience, and by the personal observations of the Fellows of the Society in their use of these waters, in recommending them to the public as a most valuable medicinal agent in the class of cases indicated in Dr. White's paper read before this Society during Tuesday night's session.

NIGHT—THIRD DAY.

Dr. H. M. Clarkson, from the Committee appointed to consider the several recommendations made in the "President's Address," reported favorably as to the suggestion about Inter-State Representation, and the holding of Sanitary Conventions, but thought the suggestions about Commitment of Insane "unnecessary reflections on the officers of insane institutions." The suggestion relating to "Collective Investigations of Diseases" is impracticable and too voluminous for the Society to undertake. "We cordially recommend action on the suggestions referring to government surgeons engaging in private practice; and we do this

as an act of courtesy and justice to our medical brethren of Norfolk and vicinity, who are the complainants in the case." "We respectfully decline to recommend any action in regard to the suggestion about the Inter-National Medical Congress, as we consider discussion of this subject at this time injudicious." The report recommends the suggestion favoring a monument to Dr. Benjamin Rush.

Dr. J. S. Conrad, Delegate from the Medical and Chirurgical Faculty of Maryland, Resident Physician at Matley Hill Sanitarium for Mental and Nervous Diseases, Baltimore county, Md., by invitation read a paper entitled

Psychological Aspect of Suicide,

of which the following summary is presented:

1st. Suicide increases with the advance of civilization, and is but little known in the savage state of man.

2d. The act is an intelligent act (?), done with a free consciousness of the act, as shown by the methods of execution, whether by the sane or insane.

3d. That suicide is done always for the purpose of escaping an evil and for the benefit of the *felo de se*, whether by sane or insane.

4th. That it is a voluntary act (?), whether by sane or insane.

5th. That it is an emotional act, whether by sane or insane, however deliberately planned and executed, since deliberation enters into the mind of both mental states.

6th. That delusions are not essential to the distinction as to the sanity or insanity of the suicide, since authorities affirm that delusions are not essential to the proof of insanity.

7th. That suicide is rare in the first-class insanity (by Maudly), viz.: Intellectual or ideational insanity; but does occur in the vast majority of the second-class, or affective, or emotional forms of insanity.

8th. Query? Is suicide an intellectual act, notwithstanding the intelligence exercised in its execution? Or is it an emotional act, *per se*, since we have seen that the emotional part of mind dominates the ideational centres, and perverts the intellect into being its humble servant?

9th. Does moral depravity satisfactorily account for it, when we have seen that moral depravity is a factor of both sane and insane?

10th. That in doubtful cases of the *felo de se*, very great caution is necessary in making up a just judgment as to the one or the other.

Dr. Archer Atkinson, of Baltimore, Md., delegate from the Medical and Chirurgical Faculty of Maryland, by invitation, read a paper entitled *Causes and Treatment of Irritable Rectum, with Report of a Case of Extensive Hæmorrhoids in a Female.* This paper will appear in full in the November number, 1885, of the *Virginia Medical Monthly.*

Dr. Wm. G. Eggleston, of Chicago, Ill., a Fellow of this Society, but associated in the editorial staff of the *Journal of the American Medical Association*, read a

Contribution to Conservative Surgery—Gun-Shot Wound of the Hand.

A shot-gun cartridge exploded in a doctor's hand. The load passed through the palm, terribly lacerating the whole hand from near the wrist to near the phalangeal articulations, tearing away muscles, bones and a part of the superficial palmar arch and other blood-vessels. The primary hæmorrhage was not of consequence. Dr. J. D. Eggleston, of Hampden Sidney, Va., (father of the writer) saw the patient within twenty minutes, and a few minutes later the reporter (who was visiting Virginia at the time) arrived. Shock was easily controlled by morphia and atropia hypodermatically. The injured parts after cleansing were placed as nearly as possible in their proper relations, spiculæ of bone and clots were removed, the wound sutured, compresses applied and the whole metacarpal portion of the hand suitably bandaged. Normal temperature returned in two hours to the pendant fingers and the distal parts of the hand. Spirits of turpentine was poured over the wounds and bandages. Next day, in addition to the former dressing, a solution of corrosive sublimate (1:3800) was applied to the parts. A rubber drainage-tube was introduced on the third day, through which the wound was cleansed twice daily with the corrosive sublimate solution. Horse-hair drainage was substituted for the tubes on the twenty-second day. A few days later bandages were removed and dry bismuth was dusted over the wounds. At this time (six months after the wound), the wounds are perfectly healed. The second finger is rather stiff, in a semi-flexed position. The third finger—the worst injured by the accident—is stiff and useless. One-half of the articulating surface of the first phalanx sloughed away nine or ten weeks after the injury. The little finger is a little stiffened, but in a good condition. The grip of the hand is good. The third finger should have been removed.

Dr. W. R. Cushing, of Shawsville, Va., presented the report of a

Case of Premature Birth with the Membranes Intact.

The labor was normal. In the fluid contained in the membranes, the child was kicking. The membranes were duly punctured, the cord tied, and the child lived sixteen or eighteen hours. No hemorrhage attended the labor. Such a case is rare. A point of practical importance is the effect the possibility of such births must have upon the lung-test in deciding whether or not it was a live birth. Heretofore prisoners charged with infanticide have been admitted to be innocent when it could be proven that the child had not breathed. But here is a case where a living child could have been deliberately killed after birth without ever having breathed. In fact, the usual lung-test would have acquitted the criminal.

Dr. Wm. D. Hooper, of Liberty, Va., read the report of a *Case of Irritation of the Ganglion of Remak, or the Inhibitory Nerve of the Heart Cured by Tobacco-Smoking*, which will be published in full in the November number, 1885, of this journal.

Dr. Wm. C. Dabney, of Charlottesville, Va., read a paper on the

Physiological and Therapeutic Action of Antipyrin.

This most powerful antipyretic yet discovered was first prepared by Knorr, of Erlangen, by the action of acetic ether on anilin. It is a white powder, soluble in half its weight of hot water, and remains in solution when cooled. It has a faint pepper-grass odor, and a bitter taste, which can be readily disguised, and which, at any rate, soon passes off. As to its *physiological action*, in health, a dose of thirty grains does not depress temperature. Queroli says it dilates the skin blood-vessels slightly, and this effect is greater in febrile conditions; but the arterial pressure is either not affected or slightly increased. If the capillaries and small blood-vessels were materially dilated, the arterial pressure would fall. It does not affect the frequency of respirations. It lessens the frequency of the pulse. In large quantities, it kills animals by cardiac paralysis. It generally produces perspiration in healthy individuals, and nearly always causes profuse sweating in pyretic persons. The urinary secretion is usually diminished. Urea is increased, and the urine does not contain albumen. It is eliminated by the kidneys; a few drops of liquor ferri perchloridi added to the urine produces an intense red color. It probably acts by a direct action on the thermogenic centres in the brain.

It is claimed that antipyrin is hæmostatic. It is undoubtedly antipyretic. It has been used in pneumonia, typhoid fever, recurrent fever, measles, lymphadenitis, phthisis, intermittent fever, acute rheumatism, etc. It is least efficacious in pneumonia, although in a few cases it has acted admirably. Give it cautiously during the defervescent stages lest collapse be induced. In typhoid fever, after two doses of half drachm each, at an hour interval, there is usually a fall of 2° or 3°, which lasts from six to twelve hours. It does not modify the course of the disease, though it alleviates many of the troublesome symptoms. It soothes the patient who drops into sleep. It temporarily lessens the delirium in those very cases in which quinine increases it. Dr. W. H. Draper's experience with it, as compared with cold baths and quinia, is very satisfactory. It modifies the nervous symptoms, and rapidly cleans the tongue. It is generally useless in remittent fever. Good results have followed its use in puerperal septicæmia. In one of Dr. Dabney's cases, two doses of half drachm each at one hour's interval lessened the temperature from 105° to 96.5, and the pulse rose from 130 to 160, and the normal heat was not regained for nearly eighteen hours. In Dr. Boldt's (New York) two cases, sixty grains caused a semi-comatose condition and symptoms "generally resembling those of carbolic acid poisoning." In scarlet fever, it delays the appearance of the eruption, though some report more favorable results. Opinions vary as to its value in phthisis. Holland, of St. Moritz, and others, say it is the best of antipyretics in this disease. Dr. George B. Shattuck, on the other hand, says that its desirability "is questionable." Certainly it should be given with great caution. Agaricine and atropia will prevent it from producing too great sweating.

It produces unfavorable results in pregnant women. Chief among its unfavorable effects is collapse. It also produces an eruption much like that of measles, which, however, was unattended by any unfavorable symptoms.

The dose in phthisis is from 7½ to 15 grains every four or six hours. Filehne recommends two half drachm doses at an hour's interval, and an hour later, fifteen grains more—especially in typhoid fever and pneumonia; but the use of from ten to fifteen grains every three to six hours is the preferred plan. Antipyrin acts well in children, for whom the dose is a grain and a half for each year of age. Hypodermically, the dose is from ten to fifteen grains; by enema, from ℈ij to ʒj. As a suppository it is said to have an excellent effect on hæmorrhoids.

The Secretary announced receipt of a *Sketch of the Life of Elisha Cullen Dick, of Alexandria, Va., one of the Consulting Physicians in the Last Sickness of General Washington*, by J. M. Toner, M. D., of Washington, D. C., an Honorary Fellow of the Society. Thanks were voted Dr. Toner, and the paper was ordered to be published in the forthcoming volume of *Transactions*.

Drs. R. A. Lewis, of Richmond, Joseph A. Gale, of Roanoke, and E. A. Craighill, of Lynchburg, were appointed a Committee to secure proper protective legislation as to the manner of dispensing poisons.

On motion by Dr. L. B. Edwards, it was voted that, in view of the unusual number of papers presented during this session, any author of a volunteer paper might have the privilege of withdrawing his paper and contribute it to journal literature—only notifying the Secretary as to what journal the contribution was made.

Adjourned, to meet in Fredericksburg, November, 1886.

About midnight, the hospitable host—Colonel C. A. Colhoun—invited the guests at the hotel—ladies and gentlemen—into the dining-room, where a sumptuous and handsomely arranged banquet had been prepared in compliment to the Medical Society of Virginia. After indulgences at the tables, toasting was the order of the night for an hour or two. In addition, the ball-room was kept open till near the peep of day, where music and dancing were enjoyed by the young and the old. In the way of hospitalities and bountiful provisions for the comfort and pleasure of the Fellows of the Society and their families, nothing like it has heretofore occurred in the history of the Society. "When shall we see the like again?"

VIRGINIA STATE BOARD OF MEDICAL EXAMINERS.

In the April number, 1885 (pages 34–41), of the *Virginia Medical Monthly*, we gave a full report of the proceedings of the Virginia State Board of Medical Examiners through the April meeting. The list of twenty doctors named on page 41 includes the names of all doctors (except Dr. K. H. Trimble, whose name was accidentally omitted) who had then been permitted to *begin* practice of medicine in Virginia since January 1st, 1885. The name of Dr. T. L. Booten was im-

properly recorded, it should be erased from the list. Now we have to add the names of other doctors who have likewise been granted certificates to practice. If our subscribers will keep these lists together as we shall publish them from time to time—about twice a year—they will be able to keep a correct register of all doctors who may have entered lawfully upon the practice of medicine in Virginia since the day the State Board of Medical Examiners came into authority—January 1st, 1885.

To the list of nineteen doctors named on page 41 (April No., 1885, of this journal) we have now to add, *first*, the name of *Dr. K. H. Trimble*, *Monterey*, *Highland Co.*, and then the names of twelve physicians, each of whom has been examined at different times by three individual members of the Board, according to law, and licensed since the April session of the Board by the President (Dr. William C. Dabney, of Charlottesville, Va.) to practice medicine within the boundaries of Virginia:

Doctors.	Post Offices.	Counties.
John W. Bolen	Fancy Gap	Carroll.
O. S. Bums	Lebanon	Russell.
W. W. Buck	Rural Retreat	Wythe.
I. T. B. Hyslop	Pungoteague	Accomac.
A. T. Keen	Sago	Pittsylvania.
J. C. Meredith	Nokesville	Prince William.
E. M. Magruder	Charlottesville	Albemarle.
H. W. McElwee	Low Moor	Alleghany.
W. S. Robertson, Jr	Pleasant Gap	Pittsylvania.
P. S. Roy	Fredericksburg	Spottsylvania.
S. S. Simpson	Aldie	Loudoun.
E. F. Truitt	* * *	* * *

Hence *thirty-two* physicians in all were licensed by the Board to practise in Virginia from January 1st, 1885, up to the second semi-annual meeting of the Board, at Alleghany Springs, Va., September 15th, 1885.

During the time included between the dates just named, eight applicants were rejected after examinations—seven during the April session in Richmond, and since that time one who undertook to pass examinations before three individual members of the Board, as provided for when the Board is not in session. Two of these rejected applicants have applied a second time, passed satisfactory examinations, and are included in the above list.

This detailed statement brings our report up to the duly

announced session of the *State Board of Medical Examiners*, held at *Alleghany Springs*, *Montgomery Co.*, *Va.*, which began at 10 o'clock, Tuesday morning, *September* 15*th*, 1885, a few hours preceding the convening of the Sixteenth Annual Session of the Medical Society of Virginia at the same place.

The following members of the Board were in attendance: Drs. W. C. Dabney, O. B. Finney, S. W. Carmichael, L. Lankford, R. A. Lewis, J. H. Claiborne, W. J. Harris, Rawley W. Martin, W. L. Robinson, T. B. Greer, Alex. Harris, B. Brown, H. T. Nelson, R. J. Preston, R. D. Huffard, S. W. Dickinson, H. G. Latham, Harvey Black, Oscar Wiley, Z. G. Walker.

Minutes of the April meeting were read and approved.

The chairmen of the different sections on which candidates were to be examined read their respective reports of *Questions*, which were accepted by the Board, and the single applicant present, *Dr. Thomas M. Norton*, of Alexandria, Va., was soon busily engaged in writing out the answers to the same. This applicant was put in charge of a committee and the Board proceeded to transact business.

Some discussion took place in regard to the standard to be attained by applicants in the future—that at present prevailing requiring an aggregate of 75 per cent. of the total number of questions propounded to be satisfactorily answered.

Dr. Lewis moved to re-insert the word "*each*" in the by-law on the subject so as to require the applicants to attain 75 per cent. of excellence on each branch. In the present status of the by-law, an applicant might possibly attain the desired standard and refuse to answer a single question on two of the eight subjects.

Dr. Nelson moved as a substitute (Dr. Lewis accepting): That a committee of eight, consisting of the chairmen of the different sections, be appointed to take into consideration the advisability of adopting a *minimum standard* on each of the different branches on which candidates for admission to the medical profession in Virginia are examined, below which, if any applicant fall on any one branch, he shall be rejected, even though he aggregate 75 per cent. This committee is to report at the next session of the Board. After some discussion this substitute was adopted.

The report of the President was read, embodying the results of the work of the Board up to the present session, most of which has been virtually given in the earlier pages of this article.

The report calls attention to the fact that B. B. Halsey, of

Orange county, is practicing medicine in that county in defiance of law, in that he has no permit from the Examining Board, although he began practicing after January 1st, 1885, and failed to stand a satisfactory examination before the Board.

Furthermore, the matter of a Dr. Parsons, of Salem, "*dispensing a treatment*" without either paying a license-tax or having stood an examination before the Board, was presented with the statement that the attention of the proper authorities had been called to the violation of the statute.

The report next announces the resignation from the Board of Dr. O. A. Crenshaw, of Richmond, Va., and continuing, says: "It is my painful duty also to announce officially the death—as is doubtless already known to every member of the Board—of Dr. F. D. Cunningham, of Richmond. I need not say what a loss the profession, and especially this Board, has sustained in Dr. Cunningham's death. An able, honest, fearless man, and a faithful friend has passed away, leaving a gap in our ranks which it will be *impossible* to fill."

The report was accepted as a whole, and on motion of Dr. Martin it was resolved that so much of it as referred to the death of the late Dr. Cunningham, Vice-President of the State Medical Examining Board of Virginia, be spread upon the minutes of the Board in the form of a resolution.

Dr. H. Grey Latham, of Lynchburg, was unanimously elected Vice-President of the Board to fill the vacancy left by Dr. Cunningham's death.

Dr. Dabney, President of the Board, read his report prepared for the Medical Society of Virginia. The report was fully endorsed by the Board.

Dr. Lewis moved that the Advisory Committee draft resolutions relative to the death of Dr. F. D. Cunningham, send a copy of same to the family, and have them published in the medical journals of the State and in the Richmond papers. Carried.

On motion of Dr. Alex. Harris, it was determined that the Fall Session of this Board shall be at the same time and place as the meeting of the Medical Society or Virginia.

The Board then adjourned to meet in the city of Richmond on the call of the President.

Dr. Thomas M. Norton, of Alexandria, Va., passed the examination satisfactorily—making thirty-three physicians licensed by the Board since it began work.

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LANDON B. EDWARDS, M. D.....Editor and Proprietor.

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Editorial.

Death of Dr. William Harvey Coggeshall.

"What shadows we are, and what shadows we pursue!" This sentiment is uppermost in the mind, in undertaking the inditing a brief biographical sketch of our late associate in the conduct and management of the *Virginia Medical Monthly*. How like a dream! But yesterday *Dr. William Harvey Coggeshall* was at our side; to-day he is dead, and already the flowers that were laid on his untimely grave have not only lost their bloom, but are wilted, faded, and dead. Fit memorials rather of life's brevity and uncertainty than of the enduring affection that clings to the memory of the departed!

Dr. Coggeshall was born in Fitchburg, Mass., December 24th, 1850. His parents, Wm. S. and Matilda A. Coggeshall, who survive the deceased son, moved to Brooklyn, N. Y., when he was but five years old, where he received his early elementary education, in the public schools of the city. At fourteen years of age he was sent to a private school in New Jersey, where he spent a year, and then the year following he was in a private school in Dutchess county, N. Y. As early as the Fall of 1869, he attended his first course of medical lectures, at Bellevue Hospital College, New York city, and continued at the same College from session to session, till the Spring of 1871. The following winter he spent in attending lectures at Long Island College Hospital, in

Brooklyn, and graduated in medicine in the Spring of 1872. During the period of his college life, his health being bad, he spent his vacations away from home, and for the most part in Southern States. After graduation, still in the pursuit of health, he spent a year or two in Villisca, Iowa, where his health was so far restored as to enable him to enter on the active practice of his profession. But the rigors of the climate compelled him to seek a more Southern clime; and, after travelling extensively for his health, in the year 1877, he settled in Henrico county, Va., about five miles from the city of Richmond, and here again he re-entered the practice of medicine. In December, 1882, he settled in Richmond. In 1883, he was employed as a general assistant to the Editor in the office of the *Virginia Medical Monthly*. On January 1st, 1884, by purchase, Dr. Coggeshall became joint owner and proprietor of the *Monthly*, in which capacity, as co-editor and proprietor, he continued until his relation was suddenly severed by his death, which occurred about 9 P. M., on the 7th of September, 1885, as the result of tetanus.

In 1873, Dr. Coggeshall was married to Miss Alice White, of Brooklyn, N. Y. She, with one child, a boy now ten years old, survives the deceased husband.

Dr. Coggshall was singularly gifted in intellect. His memory was a remarkable faculty. As a student, during the period of his tuition, he carried off the highest prizes awarded, both for scholarship and deportment. In his riper years, he was a model of gentlemanly propriety; and, withal, he possessed a genial, generous nature that welded his friendships, and bound those to him in whom he confided as "with hooks of steel." We would be suspected of over statement, and charged, it may be, with extravagant eulogy if we were to give utterance to all that might be truthfully recorded of his private virtues, of his social excellences, of his intellectual endowments, and of his medical learning and professional skill.

In 1883, Dr. Coggeshall joined the Medical Society of Virginia, and at once manifested the liveliest interest in all that pertained to the prosperity and general growth of the association. At the session of 1884, he read a most admirable paper on "Rectal Etherization," which elicited the most favorable and complimentary comments from all who heard it, and has since been extensively quoted by the leading medical journals throughout the United States. At the last session of the Society, he was to have read a paper on the "Recent Plymouth (Pa.) Epidemic, and the Lessons it Teaches"—a

paper he had just finished before the fell destroyer struck the pen from his hand. This paper was presented at the meeting of the Society held at the Alleghany Springs in September, and is published in full in the present issue of the *Medical Monthly*.

But his work is done, and he has gone to an early grave. In his death, the medical profession in Virginia, and, we may say, that of the country at large, loses a rising man of far more than ordinary promise; the circle of his more intimate friends loses one of its brightest links, and the family of which he formed a part sustains an irreparable loss; while the writer of this, perhaps, too guarded a tribute to his memory, loses a trusted friend, a faithful co-worker in editorial life, and a most agreeable and entertaining comdanion in the little intervals left for converse and recreation amid the unremitting pressure of daily toil, and the anxious solicitudes incident to the round of professional duties among the sick and dying. We lay a single flower on his grave as a faint expression of our devotion to his memory, and turn to the stern duties of every-day life, still feeling—

"What shadows we are, and what shadows we pursue!"

Medical Society of Virginia.

We have devoted so much of the space in this issue to the report of the proceedings of the recent session that we have no room left us for comment. The hospitalities offered by the Proprietor, Colonel C. A. Colhoun, and the enjoyment of them by all in attendance, cannot be exceeded. In scientific value, the session was exceedingly profitable. The attendance was the largest ever had, and 105 new Fellows were added to the Register. It is getting to be a matter of reflection upon one's professional standing now not to be a Fellow, since no "irregulars" are admitted to membership. An unwarrantable accusation, on the last night, against a Fellow not present, who had been elected to a position of high honor, led the Society to do a wrong which we regret, and hope to see corrected at the earliest opportunity. Indeed, some who were innocently parties to the wrong are now open in their expressions of denunciation.

Richmond Eye, Ear and Throat Infirmary.

We are glad to see the success of our local medical institutions, and notably among them is the Richmond Eye,

Ear and Throat Infirmary. This institution, starting in a small way four years ago, has become such a necessity to our city and State at large, that the Trustees were compelled to buy a large building to meet the increased demand upon it—No. 217 Governor street, facing Capitol Square, a central and beautiful site. It has accommodations for twenty-two in-door patients, and a large out-door clinical department. Although the new Infirmary has only been opened a few days, it has already received patients from several Southern States. Dr. Joseph A. White is the Surgeon in charge.

St. Luke's Home for the Sick.

We would also call attention to the Fall opening of St. Luke's Home, an institution which has had a most phenomenal success under its admirable management. It has been closed during the Summer for repairs; was re-opened on September 19th, and is rapidly filling with patients from our own and neighboring Southern States. This institution can accommodate from forty to fifty patients. The medical staff is unchanged—Dr. Hunter McGuire being the Surgeon in chief.

The Retreat for the Sick
does not close during the year. It continues its work under the energetic management of the President, Mrs. Wm. A. Jenkins.

The Medical Library of Dr. Coggeshall is for sale privately. It contains many valuable works. Parties interested would do well to mention what books they wish to purchase, and address their letters of inquiry *at once* to the Editor of the *Medical Monthly*, who will have immediate replies made. All such letters of inquiry should be written on separate sheets of paper from those on which any other matters are referred to.

The Engraving and Biographical Sketch of Dr. George Reuling in this number is the beginning of a revival of the Gallery of Distinguished Medical Men. From time to time we shall make other like publications.

Much matter that had been prepared for this issue has been laid aside because of the great pressure upon our space made by the reports of the Medical Society of Virginia.

The Virginia Medical Monthly—Important Notice.

will continue under the sole management of Dr. Landon B. Edwards, as Editor and Proprietor. The terms of purchase of Dr. Coggeshall's half-interest compel prompt settlements of all outstanding claims. Both subscribers and advertisers who may receive statements of accounts this month are therefore requested to give them immediate attention.

Obituary Record.

Dr. Francis Deane Cunningham

Died at his residence in this city September 11th, 1885, aged 49 years, after a lingering illness. He received diplomas of graduation from the Medical College of Virginia (1857) and the Medical Department of the University of the City of New York (1859). The year 1859-60 he spent at medical institutions in Europe, and returned to Richmond in 1861, when he began practice in partnership with his father —an eminent practitioner in this city until he retired about 1870. In July, 1861, Dr. Cunningham was commissioned Surgeon in the Confederate States Army, and as such served in various capacities until the close of the war—mostly in the armies of the trans-Mississippi Department. He succeeded to his father's very large practice, and added thereto year by year until failing health compelled him to forbear from hard work about a year ago—soon after the death of his wife. He was ever progressing in the medical profession, and enjoyed distinguished honors. From 1867 till about 1880, he was Professor of Anatomy in the Medical College of Virginia, of which he was afterwards elected Emeritus Professor. He manifested the intensest interest in the Medical Society of Virginia, which he helped to organize in 1870, and of which he was made President, 1875-6. On the organization of the Virginia State Board of Medical Examiners, January, 1884, he was elected one of the two Examiners from the State-at-Large, and was afterwards its Vice-President until his death. He possessed every element of merited popularity, and lived and died surrounded by such friends as any would be proud to claim. He leaves a son who is now a student of medicine. Want of space does not permit us to say more at present of this true and zealous friend of every worthy enterprize undertaken by or for the good of the profession.

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Original Communications.

ART. I.—**Causes and Treatment of Irritable Rectum, with Report of a Case of Extensive Hæmorrhoids in a Female.*** By ARCHER ATKINSON, M. D., late Professor Materia Medica and Dermatology and Professor of Practice of Medicine in Baltimore Medical College; Member Baltimore Microsccpical Society, and ex-Member Academy of Sciences, Baltimore, Md.

1. This paper treats of a case of *extensive hæmorrhoids in a female* over 60 years of age, who suffered with great loss of blood for many years, attended with constant irritation of bowel, bladder and uterus to such an extent as to render life unpleasant and unprofitable. A lacerated perineum contributed much to her suffering, in failing to support the bowel.

2. It gives a brief study of the anatomy of the part, and refers to some of the causes which induce painful sympathy with neighboring organs.

3. A consideration of the nature of hæmorrhoids generally.

4. The singularity of the hæmorrhage, as well as the effective method adopted in suppressing it.

It is common, in this class of diseases, to notice the aptitude of irritable rectum to give rise to tenesmus of the bowel

*Read before the Medical Society of Virginia at Allegnany Springs, Va., September 17th, 1885.

and the bladder in females, and in the male with the addition of enlarged prostate gland. The very nature of the formation of this portion of the alimentary canal favors this tenesmus, for the rectum lacks the longitudinal muscular band of white fibrous substance which we find in the colon, but its muscular structure embraces its entire circumference. On account of the absence of this band, and from other causes, we lack the wave-like (peristaltic) motion of this part of the bowel below the beginning of the sigmoid flexure, all the way down to the outer sphincter ani, which extends, in most persons, seven and a half inches—that is, from the end of the flexure down to the aperture called the anus. The course of the rectum lies altogether within the pelvis, and at its lower back part—that is, the lower part of the large gut beginning at a point opposite the left sacro-iliac junction, and which we term the rectum. It is a misnomer to call it rectum, if by that word we mean straight, though the word may have been intended to convey the idea that the bowel emptied itself *directly* into the outer world, the two adjectives being used synonymously. The rectum runs obliquely downwards, first leading to the left, where it leaves the sigmoid flexure of the colon, somewhat to the right, so as to take a forward course just in front of the lower part of the sacrum and the coccyx. It is therefore behind the bladder, the seminal vesicles, the prostate gland, and the neck of the bladder in the male, and in the female lying behind the neck of the bladder also, as well as behind the neck and body of the uterus, and closely up behind the vagina. After reaching a point first behind the prostate gland in man, it changes to a backward and downward direction, so as to reach the perineum or floor of the pelvis. In the male we find the space filled in *between* the rectum and bladder with simple cellular and adipose tissues, while the same kind of structure fills up and pads in the female the recto-vaginal space. At the upper part of the rectum, we find a narrowing in the normal state, as it were, of the sigmoid portion; so that the part above this narrowing is capable of holding much more of the fœcal matter than the rectum proper, and which is generally the seat of an im-

pacted bowel; and but for this wise provision of Nature, there would be constant dread of inability or of difficulty of retention, which in society would render one apprehensive of accident. Now we find the rectum, from being narrow at its upper end, become dilated into a pocket called the "rectal pouch," just above the anus proper. The contractile power of the rectum depends on the will of the individual for the most part, showing the muscles to be of the red voluntary variety.

In the ordinary condition of the healthy bowel, the rectal orifice is free from other irregularities than such as result from the pucking together of the folds of the bowel like the neck of the old-fashioned reticule when closed up, which was formerly used by ladies for carrying their fancy work. In the condition attended with irritable ulcer or fissura ani, or with hæmorrhoids, we find irregularities, and often tabes of hypertrophied flesh or of half skin and mucous membrane.

The "rectal pouch," just referred to, is capable of great distension, as well as of resisting a vast amount of injury, and even, by careful manipulation, the bowel at this point may be made to admit the whole hand, and even bottles have been removed from the rectum. I once removed the bone of the head of a very large fish from the rectum of a medical gentleman, who had walked seven miles for relief, because he could not bear to sit in a buggy or on the saddle. The bone was divided and removed piecemeal.

The mucous membrane of the rectum is tough and thick, and adheres very loosely to the muscular layer—indeed being able to slide slightly over it. The average diameter in man of the firm fœcal mass is from three-fourths to one inch, though it is not difficult, in the effort of relief of constipation, for the mass to attain an inch and a half in diameter; and in proportion to its firmness, its volume, and the force with which it is protruded, it becomes one of the factors in causing fissure in the membrane, and in setting up that amount of irritation, oft repeated, which in the end gives rise to the commencement of piles, which may be only a slight varicose condition of the mucous membrane for years, but

which, from prolonged costiveness, from itching piles (pruritus ani), or from straining, may and will often grow into a regular hæmorrhoidal tumor. In this way, from straining and want of support, the case we are about to study appears to have begun—the want of support here having arisen from laceration of the perineum in her first child-birth.

We have noticed that the upper part of the rectum lies just behind and in contact with the back of the bladder in the male, but in the female the uterus lies between the back of the bladder and the front of the rectum. We thus find a close juxtaposition, in both male and female, between the rectum and the pelvic organs, sufficient at least to account for the exquisite pain and bearing-down so often observed in persons who have protrusion (prolapsus ani) of the rectum and irritation of the neck of bladder, and of the prostate glands. The trizone vesicale is intimately connected with the front of the rectum, while further up and in front we find the seminal vesicles in the male, one on each side as well as the under surface of the prostate gland. This prostate gland (and naturally the adjacent vesicles) are prone to irritation as age appears, and it is often in middle life that piles mostly are troublesome. I recall just now one gentleman who came to me to be relieved of constant desire to urinate—as often as twenty times during the night. Examination revealed to the touch a prostate twice the normal size, and very tender. This patient also had four hæmorrhoids, which for years had kept his bowel in a state of prolapse, and the prostate in a constant state of irritation. I operated on the piles, and replaced the prolapsed bowel, and by the aid of strychnine injections along the ischio-rectal region, the desire to micturate so far subsided that he slept uninterruptedly from 10 P. M. to 7 in the morning.

Just beyond the prostate, the rectum dips so as to reach the anal opening, and becomes invested with the fibres of the internal sphincter muscle, and on both sides becomes clasped by the levator ani muscles, which not only help to keep it in place, but also help to increase the tenesmus in both sexes, where any cause of irritation is persistent. At the very tip of the rectum we find the tube surrounded by

the real sphincter ani (the external). In the female, the lower part of the bowel is firmly connected with the back of the vagina by dense cellular tissue, which aids in preventing too great laceration in rapid labor, and when the head is large, or the shoulder very sharp; yet this very close connection affords facility for the formation of retro-uterine abscess and recto-vaginal fistulæ.

The structure of the rectum is in every way more substantial than that of the colon or the small intestines; being thicker and having an abundance of thick voluntary muscles, this part is more prone to rebellion when irritated. The nerves, too, are abundant here, coming from a double source, viz., from the cerebro-spinal system and from the sympathetic also. The cerebro-spinal nerves come from the sacral plexus, while the sympathetic proceed from the inferior mesenteric plexus and from the hypogastric plexus, all serving to show how abundantly this part is endowed with nervous sensibility, and why the neighboring viscera are affected by any source of inflammation or irritation. The blood vessels, too, are abundant, coming from three sources—that is: 1st. From the superior hæmorrhoidal branches of the inferior mesenteric artery; 2d. The middle hæmorrhoidal branches of the internal pudic artery, either directly or indirectly; and, 3dly, from the inferior or external hæmorrhoidal artery, which comes from the pudic. Thus, we see, that a piece of bowel only seven inches long is well supplied with arterial blood for its own nourishment, and with some to spare for occasional hæmorrhages. The veins of the rectum are more numerous than its arteries, and together they go to form a network around the lower end of the bowel just above the anus. This network is called the hæmorrhoidal plexus, and is well worthy one's careful study. Some of these veins empty in the internal iliac vein and into the inferior mesenteric veins. Such as accompany the middle hæmorrhoidal artery go into the internal iliac vein. So we see that the blood from the rectum is emptied into the ascending vena cava in part, and partly too into the portal system. We can now appreciate to some extent the sufferings of such as are afflicted with painful rectal diseases, as well as the causes

of such frightful hæmorrhages as bleach and enfeeble patients with bleeding piles, to say nothing of the influences which, from proximity of tissues, favor such tenesmus or spasm of the neck of the bladder, prostate gland and uterus, while the patient suffers from *inflamed* piles.

I do not propose to go any further into the structure of hæmorrhoids generally, but simply to narrate the case of a lady patient who had for many years suffered from the spasmodic effect of the disease.

This lady, aged about 60 years, had for twenty years suffered from great irritation in the lower portion of the rectum. After suffering many years she applied to an advertising specialist, who, she says, promised her a cure. He applied some sharp liquid which, she says, caused her great agony. She tells me that she suffered two or three days from the effect of the burning fluid, which was evidently fuming nitric acid. She did not present herself again for treatment, preferring to suffer. Things went on thus for four years, when she requested my services, telling me to do what was necessary, but by no means to use the acid. She was very pale, and said she suffered from loss of blood, which flowed very freely every few days. So long as she allowed her bowels to remain unmoved there was no hæmorrhage, but on going to stool the blood would flow freely in jets just after the passage of hard fœcal matter.

Examination revealed three hæmorrhoids, one pedunculated and attached to the right side of the bowel toward the front about three-quarters of an inch above the rim of bowel; a second beginning at the inner rim on the left side and running up, but attached to the mucous membrane as above, like the double comb of a rooster. This was *much inflamed*, and gave her great pain occupying, perhaps, half the volume of the bowel. This was the one, she said, which had been burnt. The third was seated on the membrane of the back part of the bowel, consisting of an irregular mass, thick, of a dark-purple color, and not especially sensitive. The patient's attention was mainly directed to the pedunculated tumor, which, being out, often became painful from spasmodic contraction after stooling; but I noticed several times when I put it up that she complained also of the other two. I advised removal at once of the pile which became strangulated from being caught in the anus after each stool, and with her full consent I injected it with a mixture of carbolic acid and glycerine, using a large hypodermic needle, having first

washed out the bowel with tepid water, hoping to find any bleeding which might exist; but with the usual perversity in such cases, no blood came. I soon after injected the pile after the bowel was emptied, and then threw gently up the bowel with a small rubber syringe one drachm each of fluid extract of ergot and of krameria with forty drops of tincture of opium with a little glycerine, for six days, when finding the tumor very much reduced in size, I injected it a second time with the carbolic solution. The tincture of opium did great service here in controlling the spasm and the pain, and I always resort to it for the comfort of the patient in such cases. This ended the first tumor.

The second I injected three different times with the carbolic fluid with great reduction of its volume, though when I last saw her (three months ago) it was very perceptible to sight and to the touch. She is unwilling to have it interfered with since it gives her no inconvenience now.

But the third tumor was the one to which we will give our attention. She had sent several times for me to arrest the bleeding, which was weakening her so much. Each time I failed to find the bleeding, which had always ceased on my arrival. One day, however, I found she was bleeding freely. I gave an injection of warm water, hoping to excite it afresh; but though she strained and the tumor was fully protruded, yet no sign of hæmorrhage presented. I determined that further loss of blood would weaken her too much; so I injected half a syringeful of warm water into the body of the hæmorrhoid, having first prepared a double hempen ligature well carbolized. So soon as the needle was withdrawn the blood began to spirt even the full length of the bed. I at once thrust my left index-finger into the bowel, and pressing it against my thumb with the tumor between I felt very distinctly a throbbing, which I realized might be my own finger's throb, but which was really the pulsation of the artery. Feeling fully satisfied that such was the case, and finding that renewed pressure cut off the jetting, I determined to ligate the vessel, and yet the tumor was too long to embrace in the ligature; so I thrust a stout needle from without and brought it out on the other side of the throbbing vessel, thus embracing the mass (central) of the tumor containing the artery. This I tied tightly and cut off one end, the other being left to hang out. I then injected the mixture before mentioned of ergot, krameria and tincture of opium into the bowel. The bleeding stopped at once, and the case did well from that moment. In six days the liga-

ture came away, and at the first stool induced by a tepid injection came a large, firm mass of flesh which I was satisfied was the hæmorrhoid. The centre alone was tied, which caused starvation of the mass, leaving not enough of the material to sustain itself. The patient was then put on the elixir purgans of Eli Lilly & Co., of Indianapolis, which contains just the ingredients to promote gentle actions of the bowels, and which are so useful in breaking up the costive habits so common in females, in whom this condition is almost second nature.

I have recently seen a lady with stricture of the rectum who finds relief only after resorting to this elixir purgans in tablespoonful doses. Our lady with hæmorrhoids is now doing well, having only one tumor left, which occasions her no inconvenience, and which she declines to have interfered with. She alternates between the cascara sagrada, the elixir purgans, and the different bitter waters—Frederickshall and the Offner—as occasion may require. In order to replenish the lost blood, she took a tablespoonful three times a day of a mixture of which I am very fond, and which consists of cod-liver oil and the compound syrup of the hypophosphites (Fellows') with the extract of malt in equal proportions. Henry's churned cod-liver oil would answer well in these cases, the globules being so mechanically subdivided as to be readily assimilated.

I would not have trespassed on your valuable time, but that the above case and its particular mode of treatment was new to myself, and may possibly be of some service in suggesting treatment to others in cases of emergency.

Flies and Cholera.—M. Marpmann has been conducting some observations which tend to show that flies may become carriers of micro-organisms. He found that the insects take in bacteria with what they feed upon, and that the microbes are not destroyed in their passage through the intestinal canal, but are found living in the excrement.

ART. II.—**Clinical Notes on Carcinomatous Affections of the Digestive Organs—the Unreliability of Gastric Symptoms as Evidences of Gastric Pathology.*** By R. C. POWELL, M. D., Alexandria, Va.

If accuracy of diagnosis is the true test of ripe scholarship and professional ability, I can certainly lay claim to neither quality, and it might be thought presumptuous in me to suppose that you could be benefitted or interested by the recital of cases in most of which the diagnosis was erroneous, the treatment useless and the result death. But in our profession we learn as much from our errors as we do from our success. We are too often reticent in regard to such knowledge and silent concerning the method of its acquisition.

It has been my misfortune of late to see a number of cases which, to the general practitioner, presented many difficulties in the way towards an accurate opinion, and which to expert diagnosticians proved pathological conundrums not easily answered. In some of these cases, I derived no help from sight or touch. Unaided by auscultation or percussion, unassisted by chemical analysis or microscopic examination, my opinion was based solely upon symptoms which were often obscure and frequently deceptive: These cases were cancerous affections of the alimentary canal, and of abdominal viscera belonging to the digestive system.

It is not my intention to discuss the histogenesis, the histology or the microscopic appearance of malignant tumors. To the general practitioner, it matters little whether they are developed from true epithelia or the "indifferent cells:" it is of no clinical importance to us to know that, *histologically*, schirrus is no more cancerous than adenoma, or fatty tumors; and so long as eminent authorities are arrayed against each other in discussing the existence of a pathognomonic cancer cell, we can assume toward that question a position of simple agnosticism. But it is important that we should know,

*This paper was prepared for the Session of the Medical Society of Virginia held at the Alleghany Springs, Va., September 15–17, 1885; but, under the rule, due to the absence of the author, it was referred to the Publishing Committee without being read. The author has since contributed it to the *Virginia Medical Monthly*.

what cancer is, *clinically*, and by what means we can recognise its presence in these organs.

Clinically, cancer is a malignant constitutional disease which manifests itself locally by the formation of a heteroplastic tumor, without a capsule, whose growth is persistent and centripetal; which invades and metamorphoses adjoining tends to ulceration, and induces that condition of the body tissues, which will recur after complete removal, is inoculable, termed cancerous cachexia, which is recognized by extreme anæmia, progressive loss of strength and flesh without fever, and by a sensation of almost unremitting weariness.

The symptoms of cancer in the digestive organs are as varied and unreliable as the many remedies suggested for its cure. What they are, and what is their value, can best be learned from the clinical history of many cases, a few of which I propose to read.

Case I.—*Epithelioma of Lip—Recovery.*

Mrs. B——, aged 50, employed in one of the departments of the Government in Washington, came to consult me about a sore on the right side of the lower lip, which she said commenced as a wart, which she had cut off with a pair of scissors and cauterized with nitrate of silver. Upon examination, I found an irregularly shaped ulcer about half an inch in diameter with a raised indurated border, whose base was covered with small nodulated granulations, some of which resembled small polypi, having pedicles. There was some infiltration and hardness in the adjoining tissues. She complained of an occasional smarting pain; but her greatest solicitude was on account of the disagreeable appearance. There was induration of the sublingual or other neighboring glands. Some of these globular granulations were shaved off, and under the microscope showed the characteristic structure of epithelioma. The ulcer was cauterized twice daily with nitric acid, its borders and the base thoroughly burned out. This treatment was continued for one month, at the expiration of which time, the sore presented a healthy appearance and shortly afterwards she presented herself apparently well. There was no case of cancer in her family history.

Case II.—*Epithelial Ulceration of the Throat.—Sudden Death from Hæmorrhage.*

Charles Marshall, a mulatto, aged 63, for several months,

had been complaining of sore throat, which his physician had pronounced syphilitic, and for which he had received specific treatment. Examination revealed an ulcer rather larger than a twenty-five cent piece involving the anterior palatine arch, the tonsil and posterior arch of the right side. The fauces were inflamed and indurated; the submaxillary and parotid glands were enlarged and hardened, while the tonsils and posterior palatine arch were adherent. He was greatly emaciated and so weak that he could not walk across the room. The ulcer itself had a thick everted edge with a base covered with warty granulations varying in size from a pin head to the size of a number six shot. The discharge from its surface was more watery than purulent, and he complained of a sharp burning pain, and inability to swallow solid food. The case was evidently epithelial ulceration of the throat, and his condition hopeless. I ordered the ulcer to be touched with a strong solution of glacial carbolic acid; that he should have a milk and cream diet, and opiates to procure sleep.

About three weeks after my first visit, he was found one morning dead in his bed, his pillow being saturated with blood which had flowed from the mouth. From the account given me by his sister I judged that an artery had been severed by the ulceration and he had died immediately from the hæmorrhage. As I did not hear of his death for several days after its occurrence no *post mortem* was made.

The next case presents some features worthy of notice and remembrance.

CASE III.—*Scirrhus of the Stomach Resembling Cancer of the Gastro-Colic Omentum—Absence of Gastric Symptoms—Death.*

Captain Miller, an old sailor, aged 65, a small man—very thin with pale sallow skin. His only complaint was loss of of appetite and inability to eat as much as his small appetite demanded. He said that for several months he had felt a knot in his belly which he could not understand. His cachectic appearance at once suggested malignant disease. Upon examining the epigastric region, I found a hard, well defined tumor about the shape and size of a small beef kidney, which his attending physician had diagnosed as a cancerous tumor, of the gastro-colic omentum; and in this opinion I concurred. There was no pain, no nausea, no vomiting, no tenderness on pressure. He was ordered a diet of milk and cream, in small quantities, frequently given. As medicine, he took thrice daily a mixture containing one drop each of

tincture of iodine and carbolic acid, but for which, small doses of Fowler's solution were afterwards substituted. He, however, grew daily weaker, and three or four weeks after I first saw him, he died of innutrition.

When I heard of his death, I went to his attending physician and told him I would like to make a *post mortem* examination, which I did, and found the supposed cancerous tumor of the gastro-colic omentum to be the *stomach* itself. Its longest diameter was five and a half inches; its transverse diameter about three and a half inches, and its capacity about two fluid ounces. Its walls were as hard as cartilage and varied in thickness from one-fourth of an inch to three-quarters of an inch. Its appearance answered exactly to that hypertrophied condition of the stomach which is the plastic linitis of Brinton, the fibroid induration of Handfield Jones and the sclerosis of Snellen; but believing that in old age sclerosis of the stomach is always gastric schirrus, I made sections of it for microscopic examination, and to my friend, Dr. J. J. Woodward, as well as myself, it presented all the appearances of true scirrhus. The most striking feature in this case was the absence of those symptoms which are laid down as characteristic of gastric cancer.

Here let me remark that in cancerous affections of the abdominal viscera, gastric symptoms must not be accepted as evidence of gastric disease, because they are often prominent when other organs are diseased.

The next case was a pathological puzzle, the key to which was found only in the *post-mortem* examination.

Case IV.—*Scirrhus of the Pancreas, with Gastric Symptoms. Death.*

Mr. C. C. S., aged 57, when in good health, was over six feet high, weighed 230 pounds, and was remarkable for his physical strength. His father and two paternal uncles had died of what was supposed to be gastric cancer, though no *post-mortem* examination was made in the cases. For several months he had suffered from indigestion, nausea, vomiting and pain in the epigastric region. He had gradually lost flesh and strength. Suspecting the existence of malignant disease, I sought carefully, but vainly, for its location. There was no tumor or induration about the stomach; no sugar nor albumen nor tube-casts in the urine; no organic disease of the heart; no evidence of hepatic disease; no "fatty stools" suggesting pancreatic disease. In fact, there was nothing but the indigestion and other gastric symp-

toms upon which to base an opinion, except an evidently increasing cachetic appearance, which strengthened the opinion of malignant disease *somewhere*. Completely foiled in my attempts to locate the disease, I sent him to Philadelphia for the purpose of consulting Dr. J. M. DaCosta, to whom I wrote, giving my own opinion in the case, but requesting the aid of his superior ability, skill and experience. Dr. DaCosta examined him carefully, and his opinion I will read:

"1700 WALNUT STREET, Feb. 20th, 1884.

"*My Dear Dr.:*

"Excuse my not writing the opinion in the case of Mr. C. C. Smoot quite as soon as I had intended. I examined him carefully, and since he left have examined the urine, which is free from both sugar and albumen. This case strikes me as one of extreme anæmia, connected with a degenerative disease of the coats of the stomach, especially the gastric tubules. Is it malignant, and is there a latent gastric cancer? To the left of the median line I felt some resistance, but no actual evidence of a tumor, which, as you correctly say, would make the case a positive one; and in the absence of this evidence we are driven to other points to determine the matter. On the whole, I am inclined against the gastric cancer view. Irrespective of the doubtful evidence of tumor, the absence of pain, acidity and vomiting largely influence me.

"I had no opportunity of examining the stools with a view to pancreatic disease. I examined for an abdominal aneurism and found no signs of it.

"As regards prognosis, with the blood in this condition, I am not very hopeful.

"With reference to treatment, I would suggest that he take animal food, in small quantities at a time, but frequently, meat juice, etc., and about a teaspoonful of liquor pepsin glycer. with his chief meals. Besides, if it meet your views, small doses of arsenic, beginning with one drop of Fowler's solution, and increasing it gradually to five, alternating after a few weeks with sulphate of iron, seem worthy of a trial.

"I am, my dear Doctor, most truly yours,

"J. M. DACOSTA."

This letter I read to the patient and his family, but at the same time told them that, while I freely admitted the great superiority of the learning and experience that opposed my opinion, I thought that a physician of ordinary intelligence and reading, who had seen a patient daily for six months, was as competent to form a correct opinion of the case as an expert diagnostician who had seen the same patient for a half hour; therefore my opinion was unchanged in regard to the malignant nature of the disease.

Some three months after my patient's return from Phila-

delphia he died, and my request for a *post-mortem* was willingly granted. To my intense surprise I found the stomach perfectly healthy—no lesion of any kind. The liver and kidneys presented no appearance of disease. The spleen was healthy, and attached to it was a small supplemental one about the size of a pigeon's egg. Upon feeling for the kidney, I felt the pancreas, which, when removed, solved the puzzle. It was the seat of schirrus cancer, which had invaded and metamorphosed its entire structure. In the examination of these organs I had the friendly assistance of Dr. Lamb, the pathologist at the United States Army Medical Museum.

Cancer of the pancreas is regarded as a rare disease, only about six per cent of the cancerous growths being located in this organ. It is generally secondary, but in the case before us, it was undoubtedly primary, as no other organ was affected. This patient was put on a diet of fluid animal food, with pancreatin, pepsin, ingluvin, and every other aid to digestion that I could think of. He took tincture of iodine and carbolic acid and Fowler's solution and bichloride of mercury; indeed, I used everything almost but condurango and alveloz, and the effect of the remedies was absolutely nothing.

The next illustrates the rapidity of growth which sometimes occurs in

CASE V.—*Encephaloid Cancer of the Liver.*

On December 1st, 1884, I was called to see George McB., aged 67, who had taken a severe cold on board of steamer while returning from a visit to North Carolina. I found him suffering from an attack of pneumonia affecting the right lung only. This attack lasted him a month, at the expiration of which time he was able to walk about the house, and I discontinued my visits. One week after this, I was again sent for, and found him suffering from pain in the stomach, which was severe enough to justify the hypodermic use of morphia. He told me that for a year he had suffered much from dyspepsia, for which he had been treated by Dr. M. M. Lewis, of Alexandria, Va. He had lost flesh and appetite previous to his attack of pneumonia, and felt that his health was declining. Suspecting from his symptoms some disease of the stomach, I watched him carefully with the hope of being able to find out what his exact trouble was; but being unable to do so, I suggested to his son that

he should be seen by Dr. N. S. Lincoln, of Washington, in whose professional ability I have great confidence. Dr. Lincoln saw him and thought that he could detect something like a tumor at the pyloric end of the stomach, but would not give a positive opinion as to its nature. About ten days after Dr. Lincoln's visit, I detected some enlargement of the liver along its lower border, and by the middle of February, this enlargement was so great that it extended some three inches below the ribs, and its outlines were visible. At this time intense jaundice made its appearance and continued until his death, which took place February 22d, 1885.

In this case I could obtain no *post-mortem*, but the diagnosis was based on the following symptoms: For months there had been declining health with loss of flesh and strength. There had been derangement of the digestive and assimilative functions; there was a dull aching over the region of the liver, which firm pressure rendered acute pain; there was nausea and vomiting, apparently not due to cerebral, gastric or nephritic disease; there was no fever as occurs in acute hepatitis and hepatic abscess; there was intense jaundice, which is not of frequent occurrence in hepatic cancer, but, in this particular case, was due to pressure on the gall duct by the rapidly growing tumor, and lastly, because whenever you have even a slight appearance of cachexia in connection with a rapid enlargement of the liver, unaccompanied by fever, it is safe, in the absence of contrary evidence, to diagnose the case as one of malignant disease, and encephaloid cancer is by far the most common one affecting the liver.

The last case which I have to present offers a marked contrast to the one just cited, in point of duration.

Case VI.—*Colloid Cancer of Rectum—Death.*

James R., aged 33, in May, 1881, came to Alexandria for advice and treatment. In company with the late Dr. M. M. Lewis, his physician, I visited him. He had complained for some two months of dysentery, and had been treated for this disease, without benefit. We made a thorough exploration of the lower end of the rectum, and found a polypus about the size of a pullet's egg, which we supposed to be the cause of his trouble. This was removed with a double canula and wire. The next day he returned to his home, some thirty miles distant. Three months afterwards he returned and said he thought that there must be something still there, as he was far from well, and he was troubled much with diarrhœa. We again explored the rec-

tum with a Weiss three-blade speculum, and discovered a mass of colloid cancer, of which we removed as much as would fill a pint cup, and, with a curette, scraped as long as we could obtain any of the growth. There was very little hæmorrhage, which was easily checked with a swab dipped in Monsel's solution. About a week after this operation he returned home, but was never afterwards able to attend to his business. His health declined; the growth returned, and, dissatisfied with the results of the treatment he received, he fell into the hands of two or three "cancer doctors," each of whom promised to cure him. His debility and emaciation increased, until he was literally a living skeleton, but in this condition he dragged out a miserable existence until August, 1885, a period of more than four years, when he died of exhaustion.

These cases illustrate two points which I consider of much importance in the diagnosis of cancerous affections of internal organs. The first point is *the unreliability of gastric symptoms as evidence of gastric disease;* and the other is, *the great value of cachexia as corroborative evidence of malignant disease.* From my own limited experience I am almost persuaded to believe that the cachexia is the only pathognomonic sign of cancer. It is more certain proof than even the presence of a tumor, for this may, and in my own experience has, turned out to be a fibroid tumor where a cancerous growth was diagnosed.

Concerning the treatment of these cases, I have but little to suggest, for in no other class of diseases does medical science or surgical art avail so little. In a very large proportion of these cases, our efforts are to be made to sustain strength and relieve pain. To accomplish the first, much may be done by the judicious selection of food, which should be suitable to each individual case. If the disease affect the stomach, and that organ is rendered incapable of performing its part in the process of digestion, it is worse than useless to fill the stomach with meat, meat juice, eggs, or other nitrogenized principles, but rather give fats, sugar and starchy matters, which are digested chiefly in the intestines. If the pancreas is the seat of the disease, give meats, albumen, milk, *et cet.*, but let all food be pancreatized before it is used. If the liver is the affected organ, allow both flesh

and fish, but neither salted nor highly seasoned. Salt water fish are believed to be best in these cases, and your patient should have both fruit and vegetables, raw or cooked, as preferred. Harley advises in hepatic cancer, "amusement without excitement, exercise without fatigue, and nutrition without stimulation."

To relieve pain and procure sleep in cancerous affections, all modern authorities advise opium or morphia. The usual objection to its continued use has no weight in these affections. You are dealing with a painful disease, whose duration is measured by months—not years—and whose end is death. It matters little if the patient does become an "opium eater;" it is kindness to give and cruelty to withhold it, and in its use ignore grains and drops, and measure the dose by the fulfilment of the object you have in view.

The therapeutic agents most frequently used in these cases are arsenic, in the form of Fowler's solution, in combination with bichloride of mercury, carbolic acid and tincture of iodine, in a mixture containing one drop each, and bismuth is often useful in controling the vomiting. When combined with atropia, it is often useful in the treatment of that salivation which frequently occurs in gastric cancer. Cundurango and Chian turpentine have past into merited oblivion, to be soon followed by alveloz.

Clinical Reports.

A Case of Irritation of the Ganglion of Remak, or the Inhibitory Nerve of the Heart, Cured by Smoking Tobacco.*

By WILLIAM D. HOOPER, M. D., Liberty, Va.

I report the following case on account of the rarity with which it is met with, and the happy result obtained by treatment. In October, 1871, W. I., aged 18 years, applied for relief from an affection of the heart. He appeared in perfect health, and on examination I found his muscular development above the average. All the organs were acting normally. I could not detect anything unusual about the sounds or rhythm of the heart. He having taken notes of

*Read before the Medical Society of Virginia at Alleghany Springs, Va., September 17th, 1885, and by the author contributed to this journal

his case while under treatment, I will give them in his own words:

"About the first of August, 1871, I was taken with an affection of the heart, having been up to that time in perfect health in every respect. Heart disease is not hereditary in my family.

"I was taken with a violent pain in my heart, accompanied with violent beating. The beating was not like a palpitation, but more like the action of the heart of a person who has taken violent exercise, or who is frightened. My breathing was affected to some extent, though not much at first. For some time I had only one or two attacks per day, lasting at first about half a minute. These attacks have gradually increased, both in number and duration, until I have at present six attacks per day regularly, lasting from one to one and a half minutes. At first there were no other symptoms; but, from time to time, others have developed themselves, such as a palpitation, which almost always came on at night, though sometimes in the day. Next there was a jumping or jerking of the heart—only a single leap at a time, without pain or other inconvenience, except a certain full, uneasy feeling in the region of the heart. I could always hear my heart jump as well as feel it.

"The next symptom was an acute pain across the upper part of my heart, sharp and quick, as if a knife had been stuck in it, but without affecting the action of my heart so far as I could perceive, for the pain would pass off so quickly that I would not think of putting my hand over my heart before it was gone. The next that I noticed was a rasping kind of sound accompanying the first motion of my heart, and only heard when lying on my back, and unaccompanied with any pain.

"These attacks come on with great regularity; I generally have one before breakfast, three between breakfast and dinner, and two between dinner and supper, making six in all. I have fainted twice from the violence of these attacks, and was alone on both occasions; so I have no idea how long I was unconscious. On one occasion I had taken too much exercise, and having an attack, the blood ran from my nose very freely. Both on this occasion and on those when I fainted, the attacks were unusually severe. My occupation does not affect these attacks in the least; they come on very suddenly; but I have noticed that the pupils of my eyes are very much dilated just before an attack. I am unable to walk much, as I find that kind of exercise too violent for my

heart. I think, however, that mental excitement of any kind is more apt to bring on an attack than anything else."

The attacks increased one at a time, the number remaining uniform for a variable period—say one or two weeks. This uniformity was a peculiar feature, and varied only once. The day I bled him he missed the next attack, but they returned in the evening with increased violence. He was first treated with arterial sedatives, then the various nervines were tried, combined with tonics and electricity. Each remedy was used three times a day for ten days, but not one of them produced the slightest effect upon the severity or number of the attacks. At the end of *fourteen months of uninterrupted treatment*, we find him in a most deplorable condition—entirely unfitted for the duties of life, with his extremities becoming œdematous and cyanosed. I had about despaired of affording him any relief, when, fortunately, I noticed in the London *Lancet* an account of some experiments made by Professor Rulliford, of London, on the action of nicotine on the ganglion of Remak, or the inhibitory nerve of the heart. As a dernier resort, I advised him to commence smoking tobacco.

On his return visit, he informed me, while using his first pipe of tobacco the blueness faded from the extremities, and the œdema subsided to an appreciable extent, and, in fact, instead of the usual effects of the "first pipe," he felt better at the end than he did at the commencement of it. At the end of two weeks of the use of tobacco, the attacks ceased, and he has remained in perfect health; and is now (1885) an active practitioner of medicine in one of our inland towns, but I am sorry to say—still continues the use of his remedy.

Complicated Case of Herniotomy—Intestine Folded Upon Itself—Recovery. By W. T. WALKER, M. D., Lynchburg, Va.

I venture to send the following account of a case of herniotomy, performed August 18th, by Drs. Bass, McKinney and myself, upon a young man aged 20, residing in the city of Lynchburg. I was called upon the previous night about 11.30, by the father of the young man, to see his son, who, according to his statement, had been suffering with cramp colic. The family had not been able to give him any relief by the usual domestic remedies.

I found him seated upon the floor, suffering with great

pain in the abdomen, accompanied with nausea and vomiting. I at once gave him hypodermatically, morphiæ sulphatis gr. $\frac{1}{8}$, atropiæ sulphatis gr. $\frac{1}{200}$, soda sulphatis gr. $\frac{1}{4}$, and had him placed upon the bed. Upon examination, to my surprise I found a large scrotal hernia. I was now informed that his trouble had commenced about 7 P. M. that evening, when playing at base ball; that four of his companions had brought him home, and that the family did not regard the case as serious, since he had had a similar attack on the Friday before, from which he had recovered when brought home and put to bed; that he had been quite well on Saturday and Sunday, except the usual abdominal soreness following *the cramp colic*, as they supposed, and that he had gone upon the play-grounds again on Monday, but upon running he soon found his pain much intensified, and had to be brought home by his friends, since which time they had been able to give him no relief.

I at once gave chloroform to its full anæsthetic effect, and attempted by taxis to reduce the hernia, which I failed to do as he lay upon his bed, although I gave him the full advantage of positions as recommended by our best authorities. I then determined to try complete *inversion*, so that I might obtain the full benefit of gravitation and traction, with muscular relaxation, as I remembered to have most satisfactorily done on a previous occasion. Accordingly, bringing him fully under the influence of chloroform, I directed four of his friends to raise him by his legs and body, and so produce inversion, but under all these advantages of position I was unable to overcome the strangulation.

Whilst making this effort, Dr. McKinney, who had been sent for by the family previous to my arrival, came to my assistance, but was alike unable, after careful and earnest effort by taxis, to overcome the difficulty. Hence we were forced to the conclusion that only by herniotomy could we hope to afford relief. But as the light was unsatisfactory, and our instruments not at hand, we agreed that it was best to leave him under the influence of an opiate until morning, directing cloths wrung out of hot water to be kept to the parts.

On Tuesday, August 18th, at 8 A. M., Dr. Bass kindly responded to the request to meet Dr. McKinney and myself. The patient, who had been comfortable since we left, having slept well, and passed his water freely, was placed upon the table; the morphia, atropia and soda solution were repeated hypodermatically, as on the previous night. When under

the influence of chloroform, Dr. Bass very carefully attempted reduction by taxis. Failing in this, as we had done before, he advised that we should at once proceed to the performance of herniotomy.

The surrounding parts having been well shaved, we proceeded to operate by making an incision along the line of the tumor, over the external abdominal ring. Having cut through the integuments, we very carefully, with the help of forceps, and grooved director, cut the several layers until we came to the sack, which we preferred to open, rather than cut the constricting muscular fibres outside of it, more especially as there was a large quantity of much distended intestine in the scrotum. Accordingly, having opened the sack, and introduced the left index finger, we found the stricture at the external ring, which was readily overcome by the use of the probe-pointed bistoury, passed flatwise upon the finger, and then turned, so as to cut directly upwards, so as to avoid the epigastric artery. Being fully satisfied that the constricting fibres had been severed, we proceeded to examine the intestine, which was found to be in an unsatisfactory, highly congested condition; for while there were no adhesions, nor gangrene, yet the stricture had been of such a nature, and so prolonged as to give to the intestine a most unhealthy appearance—mottled, almost ecchymosed, and much distended. But believing circulation would be re-established if returned to the abdominal cavity, we proceeded to reduction, but upon making this effort carefully, the intestine gave way to the pressure of the finger upon the underside, when the contents of the tube, consisting of a large quantity of watery effusion, with a trace of pus, was passed out. The whole surface was sponged perfectly clean, when, upon careful examination, several small ulcers were observed, over a space of about two inches; these being upon the underside of the gut, and hidden by its folds, had escaped observation. The remainder of the intestine, although inflamed, was comparatively healthy. Here the grave and interesting question arose, whether we should establish an artificial anus or still attempt reduction?

After careful examination and consultation, we decided to fold the wounded and ulcerated portion *in upon itself*, and by a continuous suture, bring the serous surfaces together longitudinally, thus diminishing the caliber of the intestinal tube through the space of about three inches. Having done this, the whole of the intestine was returned, with the hope that this injured portion, together with the suture,

which was carefully turned in, as much as possible in bringing the serous surfaces together, would come away inside the tube and be cast off with the excrements. On account of the condition of the gut, we were careful not to draw the suture tightly. The outer wound was then closed by the interrupted suture, an opening being left below for drainage, and the surface well covered with dry iodoform. As the patient was still somewhat under the influence of opium and chloroform (although he had stood the operation well), and reaction, though not excessive, having duly come on, he was left in bed to rest and sleep for a few hours.

The following treatment was then instituted: Keep the bowels well locked for days with opium; give every two hours half cup of milk, and no other nourishment of any kind; and for its antiseptic as well as antiphlogistic powers, give quinia sulphate, and to keep the patient under its influence; and as we were satisfied that this valuable agent would be heightened, at least as an antipyretic, by the addition of spirits of nitrous ether, it was combined with it, and for the further reason that the action of the system would thus be thrown upon the skin and kidneys, and so taken off from the diseased, injured alimentary canal. Another reason for combining the nitre with the quinine was, that under their joint action the brain and nervous system are much less affected than when the quinine is given alone; in a word, less quinine will do more and better work when thus aided.

The result of this treatment proved most satisfactory, and was continued through several days—so long as indicated.

Dr. McKinney kept notes of the case, from which we extract the following:

August 18*th*, 7 P. M.—Evening after the operation, temperature, 102°; pulse, 90. No expression of pain, but some abdominal soreness.

August 19*th*.—Above treatment continued. Temperature, 100°; pulse, 84, 9 A. M. and 4 P. M.—about the same. No changes to note upon 20th and 21st.

On 22d, found temperature 99°; pulse, 70. Discontinued quinia and sweet spirits of nitre. Throughout the time, respiration has been about normal, urine passed freely without trouble, and the patient in every way doing well.

On the seventh day, the sutures were removed, showing just a trace of pus upon their line. Nearly the whole of the external wound was healed, having been kept under dry iodoform. As there was just a little nausea, we allowed toddy at this time three times daily. Everything continued satis-

factory until the 28th—the eleventh day after the operation—when the father came to see me, saying his son had been obliged to have an action, and that it had been quite copious. We greatly feared ill effects might follow, and I saw him speedily, and found him doing well, but again gave him opium in grain doses, repeated every six hours. On the next day there was another voluntary move, appearing soft and natural, whereupon we discontinued medicine and gave him for food nutritious soups in small quantities, keeping him confined to his bed. On the seventeenth day after the operation, we allowed him to move about the house, and regarded him as out of danger, since he had been so entirely well and comfortable in every way. He continued to improve, and at the end of a month returned to his work, and has had no trouble to this day, October 7th.

The suture was never seen, though doubtless it was passed out. A case so unusual as this naturally elicited much interest on the part of all the physicians who attended, or visited him. Had it resulted unfavorably, we might have wished that we had established an artificial anus with its very annoying consequences, and possible difficulty of cure afterwards—much more so, we are inclined to think, in a case of hernia, than from a gunshot wound. For in this latter, if union, consequent upon inflammation, be established, there is no fold of the intestine as necessary as this must be in hernia; and the spur rising up will have to be overcome by a seton, with the enterotome, or in some other way. Many of us, especially those who passed through the war, have seen an artificial anus, caused by gunshot wound, heal by granulation alone, with no local treatment except scrupulous regard to cleanliness. One gentleman, now residing in this city, informs me he, as surgeon in our Southern Army, treated one of our soldiers with this annoying trouble, when the wound healed by granulation after six months; but as the ball was not found, he supposed it must be lodged, or encysted, and advised the patient that he thus carried the ball. Within the last eighteen months he was informed by the gentleman, that when at stool he passed this ball, having suffered no ill effects from its presence meantime.

Good surgeons assert that many valuable lives are lost by

delay in operating for hernia. This case admonishes us that even when the intestine be in the unfavorable condition which we have described, it may be folded in with advantage, as we did with the wounded, disorganized portion, and so avoid the annoying alternative of an artificial anus. Had this case resulted unfortunately, we might have been obnoxious to criticism; since it resulted so satisfactorily, we invite the consideration of our brethren to the operation and treatment.

Analyses, Selections, etc.

Health Statistics of Women College Graduates.

Miss Annie G. Howes, of Boston, Mass., as Chairman of a Special Committee of the Association of Collegiate Alumnæ, has issued a report on Health Statistics of Women College Graduates, the conclusions of which seem to be perfectly fairly drawn, but which are at variance with commonly received opinion. They discredit the common belief in the lack of woman's physical powers to cope with the mental requirements of a college life. Of a total 1290 female graduates of twelve New England and Western colleges 705 made "returns" to the committees of answers to the questions, and it is upon these 705 returns that the report bases its conclusions. At the possible risk of furnishing a few of our subscribers with matter they may not care to read, because of the great interest which others rightfully manifest in the subject, we publish the formulated conclusions.

That the graduates are largely of American parentage; that the greater part of them spent their childhood in the country, and had a fair amount of outdoor exercise daily.

That 57 per cent began study in a school, and 41 per cent at home, the remaining two per cent failing to answer; that the average age of which they began study was 5.64 years, at entering college 18 35 years, at graduating from college 22 39 years; and that the average present age is 28.58 years.

That during college life the majority studied but moderately; that 44 per cent did not worry over their studies or affairs; and they were generally regular as regards hours for eating and sleeping, took a proper amount of physical exer-

cise daily, and, as regards nearly one-half of them, abstained from exercise wholly or in part during the menstrual period; that as a rule, they entered society but little, and for the most part had college room-mates.

That since graduation all seem to have found congenial occupation, a great many as teachers, while eight only are occupied with social duties to the exclusion of other occupation.

That about one-fourth have married, and that of the whole number of children borne by them, the greater part are living and in good health.

That, for all the various periods of their lives, the health of over three-fourths of the graduates has been either excellent or good; that during college life a slight falling off from excellent or good health is apparent, resulting in an increase in number reporting fair health, while, on the other hand, the number reporting indifferent or poor health is smaller than for any preceding period and but slightly in excess of the number reporting the same conditions of health for the succeeding period, or since graduation.

That over one-half of the graduates are not and have not been troubled with nervousness, and that nearly 25 per cent have had no trouble at any time during the menstrual period.

That about 60 per cent have had some disorder, the more common disorders reported relating to the stomach, liver, bowels, lungs, nervous system, generative organs, neuralgic and rheumatic affections, and to a certain extent to the heart and brain.

That the most prevalent cause of disorders is constitutional weakness, the other causes being bad sanitary conditions, intellectual overwork, emotional strain, and physical accident.

That the varying conditions of childhood, as shown in the comparison tables, have had no marked influence for good or evil upon the present health of graduates.

That the present health of graduates seems to have been affected according as their parents have enjoyed either good or poor health, the figures showing three per cent increase in health for those whose parents were both in good health, and a decline in health of over 17 per cent for those whose parents were both in poor health.

That so far as inherited tendency to disease is concerned, a decline in health has also taken place, as compared with the average good health of all the graduates, those inheriting tendency to disease from either parent show a decline in health

of three to five per cent, those inheriting tendency to disease from both parents of nearly 20 per cent, while in the case of those who have no hereditary tendency to disease, there has been an increase of nearly three per cent in good health.

That during college life about 20 per cent show a deterioration in health, 60 per cent no change, and 20 per cent an improvement; that for those who entered college at 16 years of age or under, an increased deterioration in health of between 10 and 11 per cent as compared with those who entered at a later age is observed, and of over eight per cent as compared with the whole number whose health deteriorated.

That during college life there was nearly two and one-half per cent less deterioration in health as compared with the deterioration in health reported during working time by the working girls of Boston.

That those who studied moderately show an increase in health of over three per cent as compared with average good health during college life for all graduates, while those who studied severely or moderately to severely show a decline of from five to seven per cent as compared with average health during college life.

That, as compared with average good health during college life for all graduates, those who worried over studies alone show no perceptible change in health; those who worried over personal affairs, a decline in health of over 10 per cent; those who worried over both studies and affairs, a decline in health of 15 per cent, while those who worried over neither studies nor affairs show an increase in health of ten per cent.

That for those graduates who studied severely during college life, as compared with the average good health of all graduates, a decrease in health of seven per cent at time of entering college is shown; during college life a decrease in health of over five per cent, and since graduation of exactly six per cent; that if, on the other hand, the health of these graduates at time of entering, during college life, and since graduation, are compared with each other, without regard to the health of all the graduates for the three periods, there was a decrease in health during college life of less than two per cent, an increase in health since graduation of three-fourths of one per cent as compared with health at time of entering college, and of over two and one-fourth per cent as compared with health during college life; and finally—

That although the average good health of these graduates who studied severely was considerably less than the average good health of all the graduates for the three periods considered, their health did not suffer material deterioration during college life, and has more than recovered since graduation its normal state at time of entering college.

The facts presented would seem to warrant the assertion that the seeking of a college education on the part of women does not in itself necessarily entail a loss of health or serious impairment of the vital forces. Indeed, the tables show this so conclusively that there is little need for extended discussion of the subject.

The graduates, as a body, entered college in good health, passed through the course of study prescribed without material change in health, and since graduation, by reason of the effort required to gain a higher education, do not seem to have become unfitted to meet the responsibilities or bear their proportionate share of the burdens of life.

It is true that there has been, as was to be expected, a certain deterioration in health on the part of some. On the other hand, an almost identical improvement in health for a like number was reported, showing plainly that we must look elsewhere for the causes of the greater part of this decline in health during college life. This deterioration is largely due, not to the requirements of college life particularly, but to predisposing causes natural to the graduates themselves, born in them, as it were, for which college life or study should not be made responsible. A girl constitutionally weak is always at a disadvantage, and naturally would suffer a deterioration in health, temporary possibly, or even permanent, if at the most trying period of her life, from 18 to 22 years, she seeks superior education. At the same time, fully thirty per cent of the total deterioration in health during college life was from excellent to good only. In the case of those graduates who studied severely, even, the facts reported concerning their physical condition do not show that they have suffered materially from the effects of close application, but that they have since graduation returned to the normal condition reported by them at the time of entering college.

In conclusion, it is sufficient to say that the female graduates of our colleges and universities do not seem to show, as the result of their college studies and duties, any marked difference in general health from the average health likely

to be reported by an equal number of women engaged in other kinds of work, or, in fact, of women generally without regard to occupation followed.

Veratrum Viride in Puerperal Convulsions.

We have often been surprised at the little acquaintance many practitioners, who are usually well posted as to advances in medicine, show in regard to the use of veratrum viride in puerperal convulsions. Few, if any, of our distinguished Eastern Professors of obstetrics or authors of text-books on midwifery give more than a passing mention of the fact that this drug is used by some "country practitioners" for puerperal eclampsia. But the records in favor of its adoption as the principal remedy in this disease are so convincing that we feel we but do a serviceable thing in calling attention to the subject. These favorable reports come mostly from practitioners in the Western States.

Our attention has been specially attracted to this subject at this time by noticing reports of the two cases appended by Dr. F. K. Powell, of Dancyville, Tenn., in the *Transactions of the Medical Society of the State of Tennessee* for 1885. His first case was the wife of a farmer, and occurred in 1881. She was a primipara, plethoric, having a headache, full-bounding pulse, etc. In a few minutes after his arrival, she had a severe convulsion. She was first freely bled, and then he gave her ten drops of tincture of veratrum viride combined with potassium bromide, and repeated the dose at intervals until her pulse was controlled. She had no convulsion after time had been allowed for the medicine to act. In a short time, the os dilated, pains grew stronger and more effectual, and she was delivered of a well-developed boy in a few hours without any further trouble. Treatment was continued for some time after the child was born.

His next case was a negro woman—a primipara—and had had frequent convulsions for a day before he saw her. She was half unconscious; her pulse was full; pains weak, os dilated and rigid, and the indications portended a tedious and difficult labor—such an one to relieve which many authors would advise turning and delivery. The patient was bled, and ten drops of tincture of veratrum viride were given at short intervals until the pulse was controlled. It acted like a charm. Labor occurred on the next day without any symptom of a convulsion.

The Doctor adds the advice to use fluid extract of veratrum viride hypodermically when the woman is unconscious.

He was led to try the remedy by the great success he had had with it in subduing convulsions in children suffering from malarial fever. These reports are valuable when taken in connection with many cases reported by different physicians during the last few years.

Camphor Intoxication.

In a late number of the *Annales· Medico-psychologiques*, a long account is given of some unusual symptoms following an overdose of camphor, which lasted months after. The close resemblance to many cases where, after the first profound intoxication, the nerve and brain disturbances continued for months, will be apparent to all our readers. The case was a young man with no heredity of nerve disease, and in apparent good health, who for a slight catarrh and insomnia, took, by mistake, 300 grains· of camphor. Soon after, he seated himself at the dining-table, felt chilly, lost power of speech, was bewildered, and finally cried out that he was crazy. A physician was called and emetic given, which brought up much of the camphor. He was taken to his room and, excepting some chills and hallucinations of vision and sensations of trembling, he recovered and was out in two days at his work again. Three weeks later, he suffered from severe headache, and had a well-marked hysteric sensation of choking, and when in bed, suffered from a sickening sensation of swinging. Later, exact idea of time was lost, everything seemed new at the beginning. Although able to work, all events seemed new and strange. Sensation of his height became perverted. He thought he was higher than the houses, and suffered at the thought of the great disadvantages of his height. By striking himself on the head, he felt better. He went to an asylum, and was better at first, but finally fell into a mechanical state of existence. Was contented with everything, had no care for himself or any one, would talk and seemed to realize what was said, but had no interest, or continued memory of events. Two weeks later he recovered and went about as usual. After six weeks' residence, went home, and, on greeting his family, was thrown into a trance state, in which he could not talk or act; but yet fully realized what was said and done about him. Two weeks after, from some excitement in his family he had another trance state, and came out of it very weak and trembling. For a long time after, he was conscious of an unstable brain, which seemed balanced on a very slight point likely any moment to turn over. Fragments of con-

versation went whirling through his mind, and at times his surroundings were all perverted. He would walk around and never remember what he was doing or where he was; was somnambulistic. From this time the case continued to recover. The disorders of sensation, and hallucinations of the senses, which he seemed to partially realize, pointed to central brain disturbances, that was undoubtedly the beginning of very grave lesions. This poisonous dose of camphor either kindled into activity a latent nerve defect, that was the legacy from the past, or it produced some cell change in the great centers. This emotional instability, with disordered and changing sensations and hallucinations, presenting the most diverse and complex symptoms, are often seen in inebriates, although they have been months free from spirits. In other cases it follows a single paroxysm of intoxication, and lasts for months or years.—*Quart. Jour., Inebriety*, Oct., 1885.

Treatment of Pneumonia by Quinine.

Dr. F. P. Atkinson has an article on this subject under the head of "Original Communications" in the October number, 1875, of *The* [London] *Practitioner*. He speaks of the use of quinine in pneumonia as if it were something new. We have been using it satisfactorily for the past fifteen years, and know of no one remedy for which we would exchange it. Perhaps no one author of recent years has done more to impress its almost specific virtue in pneumonia upon professional attention than Dr. Otis F. Manson, of this city—now Emeritus Professor of the Medical College of Virginia. His writings on the subject have dated from about 1871, and long since the use of quinine in pneumonia has become established practice. Dr. Atkinson's present paper in *The Practitioner* is but confirmatory of what has been recorded before, but is still worth repeating. He says:

"If the Collective Investigation Committee of the British Medical Association have done no other good, they have certainly directed attention to the treatment of pneumonia by quinine, which is destined, I think, sooner or later, to supersede all methods now in vogue. There can be no question that in almost every case (and I think there are very few exceptions) it prevents the disease advancing beyond the first stage, and rapidly causes resolution to take place. It does away with the necessity for poulticing, all that is required being the application of cotton wool to the front and back of the chest. My friend, Mr. Corbett, who has a good series

of charts to bring forward, tells me it is equally successful in cases arising in young infants as it is in adult cases, and he asserts that many children he has been able to pull through, who, in old times, would certainly have been lost. He gives an adult two grains every two, three, or four hours, according to the severity of the case, combined with hydrobromic acid, and if there is any delirium a few drops of tincture of digitalis. If there is any large deposit of urates in the water he gives some citrate of potassium alternately with the quinine. This method of treatment I have followed out with decided benefit to my patients and satisfaction to myself. Now any one who has given repeated doses of quinine to a patient will, no doubt, have noticed the profuse sweating that occurs after its administration, and I am anxious to find out as to whether quinine acts curatively through the perspiration it produces, its antiseptic action, or both? In some cases of menorrhagia it exerts a very decided influence upon the muscular tissue of the uterus; has it any influence upon the muscular coat of the arteries in pneumonia? An answer to these questions would, no doubt, help us not only in the treatment of pneumonia, but also many other febrile diseases."

Treatment of Epithelial Cancer.

Dr. T. L. Ogier, of Charleston, S. C., in the *Transactions of the South Carolina Medical Association* for 1885, sometime ago read in *Gaillard's Journal* a paper entitled "Collin's Cure for Epithelial Cancer, the prescription there given being as follows:

℞. Carbolic acid.....ʒss
Dilute sulphuric acid.....ʒij
Glycerin.....ʒss
Distilled water, q. s.....ʒij
M.—Make a lotion.
℞. Very finely powdered fresh ergot.....ʒi

Directions.—With the lotion, paint the tumor freely with a camel's-hair pencil; and just before it is dry, dust freely with the powdered ergot. This is to be repeated night and morning. Every second night apply a bread-and-milk poultice to keep the surface of the tumor soft.

My modification of this is to make the poultice contain equal quantities of bread and powdered ergot, and paint the tumor once during the day with the fluid extract of ergot.

In January, 1884, an esteemed old friend and patient consulted me for an epithelioma on the side of the cheek be-

tween the inner canthus of the eye and the ala of the nose. It had been growing some time, commencing like a mole and gradually enlarging. When I saw him he said the tumor had grown very much during the last two months. His spirits were so much depressed by the fear that the disease would extend up and destroy the eye, that I thought of removing it with the knife, and thus for a time giving him relief; I say for a time, for I have found, as a rule, that these tumors return after having been completely removed, and often in a very aggravated form. Sometimes they do not, but these are exceptions. Remembering the before-mentioned treatment, and having some experience in ergot arresting hæmorrhage by constricting the capillary vessels, I determined to try this treatment before operating.

Accordingly, I had the wash and finely-powdered ergot prepared, and with a camel's-hair pencil painted the surface of the tumor, then covered it well over with the powdered ergot, while the surface was still moist with the wash. This was done for a week, and then I modified the treatment somewhat by discontinuing the wash at night, and instead, applied a soft bread-and-milk poultice, after coating the surface of the tumor well with the ergot. This poultice remained on until morning, when it was removed, washed well with tepid water, and the wash applied as before. The reason for the poultice was because the surface of the tumor often became so dry that I thought the ergot must act better on a moist surface. This treatment was continued, and in about two weeks there was a decided dimunition in the size of the tumor; and this encouraged me to continue, varying it, sometimes leaving off the wash, and instead, painting the surface with the fluid extract of ergot, but never omitting the powdered ergot, The tumor gradually and sensibly became smaller, until, at the end of a little over three months, there remained not the slightest elevation or discoloration on the spot from which the tumor had grown. During the latter part of the treatment, I gave my patient two drops Fowler's solution, and ten drops fluid extract of ergot in a teaspoonful of water three times a day, and continued this for three or four weeks after he was quite well. It is now five months since epithelioma disappeared, and there has been no return. He is again the active, cheerful, energetic and intelligent old gentleman that he was before.

Encouraged by this case, I determined to use the same treatment on another case, which came under my care in September, 1884. The subject was in every way unfavora-

ble; he was in feeble health, emaciated, and 80 years of age. The tumor had existed for two or three years, and extended on the side of the face along the nose from the fourth of an inch from the inner canthus of the eye, down along the nose covering the ala of the nose, and extending the fourth of an inch below it. It was not attached to the ala; a brush could be passed under it. By measurement, it was two inches in length and little over half an inch in width and the fifth of an inch in thickness. I commenced by clipping off the loose part hanging below the ala of the nose, and after the bleeding ceased, painted the whole tumor over with the ergot night and morning. This I did for two weeks, bathing every morning with warm water before the applications, poulticing with the ergot powder and bread and milk every third or fourth night. It began to diminish about the fifth week, and the treatment is still continued. It has been under treatment five months, and measures now less than half an inch, one-fourth of an inch in width, and not more than two lines in thickness; there is, therefore, every reason to expect a perfect cure; the patient, however, being over 80 years of age, there can be but little time left to complete it.

The next case was a lady who had a small epithelioma about one-fourth of an inch, extending from a little to the left of the middle of the root of the nose to within about one-eighth of an inch of the inner canthus of the eye. This case is of about two years' standing, but has only been under treatment two months. It has already diminished one-third. The patient is 76 years of age.

It is singular that all these cases of epithelioma have been on the left side of the face. I do not know that the left side of the face is more liable to disease than the other, and see no reason why it should be so, but merely mention the fact of these three cases having been on the left side, and, as I have not seen any such peculiarity of epithelioma of the face noticed by any authorities, I thought it would be as well to bring it to the notice of the Association.

Professional Fees—Legislation Needed.

The following remarks by Dr. A. A. Moore, of Camden, S. C., in his Address as President of the South Carolina Medical Association, last April, will find many a sympathizing reader in other States, and earnest wisher that what he advocates were an accomplished fact. He says:

It is generally conceded, and it is true, that the crowning

charm of Medicine is, that it is pre-eminently a benevolent profession. The motives for its study and practice should rise superior to mere mercenary considerations. The fees that are often grudgingly tendered are only *honoraria*, and are not *quid pro quo* for services rendered. They are, as we fully realize, totally inadequate to the sacrifices of comfort, of ease, of health, and often of life itself, which we are required to make for the benefit of our fellow-creatures. To all this we willingly assent. But at the same time, like the rest of mankind, we are but flesh and blood. We have bodies to clothe and feed. Like other men we have families to provide for. Now I ask, when these domestic cares are pressing upon us—when these imperative and incessant demands for the absolute nessaries of life have to be met—are we not unfitted in a large measure for the efficient and successful discharge of our duties? As my predecessor has so strongly and tersely expressed it: "The *res angusta domi* admits of no compromise." This is a constant and embarrassing difficulty that peculiarly besets the pathway of the country practitioner, and impairs his usefulness to his patients, to his profession, and to the public. Is it not often true, for example, that the services of the country doctor, so promptly and so cheerfully given to the laborers of the large planter, become the very means by which he is enabled to till his broad acres, and to fill his garners with the staff of life? And yet how frequently it is the common experience of us all to be quietly informed at the close of the season that the laborer's wages are all consumed, and nothing is left for the helpless doctor! Without intended irreverence, and with a slight alteration of Biblical language, we can then literally say, "The harvest is past, the summer is ended, and we are not"—paid. They are difficulties such as these that fetter the zeal and energy of the struggling physician. He cannot perhaps even procure the necessary medicines for his daily work; he cannot supply himself with any of the improved surgical appliances; he cannot subscribe for medical journals and new books, and thus keep abreast of the rapid and ceaseless progress of medical science.

Often this very indigence hinders him from uniting with this Association, and participating in the benefits that flow from it. Is there no remedy for this evil? Can no relief be afforded to the hard-worked and half-paid physician by *legislative enactment?* The landlord is secured for his rents, the merchant for his advances, the lawyer for his fees, and the common laborer for his wages. Why then, I ask again,

should not some proper protection be guaranteed to the physician? Is he not clearly entitled to his modicum of common justice? All classes of the community will readily admit his claims for a proper remuneration; but as the poet has homely expressed it:

> "God and the doctor, men alike adore,
> Just at the brink of danger—not before;
> The danger past, both alike requited,
> God is forgotten, and the doctor slighted."

Now, assuming what I have said to be true, is this grievance of sufficient moment as to demand redress? and if so, how is it to be sought? As we have already seen, several years ago, the isolated effort of a single county society to rectify it will pass entirely unheeded. The only way, then, that relief can be obtained, if at all, is by the organized and authoritative action of the Association. With a view to this end, I would therefore respectfully recommend that such measures be devised as the Association may deem wise and practicable, whether it be petition to our State Legislature, or otherwise.

In this connection, permit me to call your attention to a hardship which the law imposes upon the physician, and which bears especially heavy upon the country physician. We are not unfrequently summoned ten or fifteen miles to attend a *coroner's inquest*. The circumstances surrounding the murder or sudden death, as the case may be, are such as to make a careful *dissection* absolutely essential. Perhaps, our limited experience not having fitted us for the speedy and skilful execution of the task, it may require several hours to accomplish it. We are thus called away from our regular duties, at the sacrifice of time, labor, and probably of more pleasant and lucrative employment, besides incurring the personal risk of septic poisoning; and for all this, exclusive of mileage, as the law now stands, we are allowed the *large fee of ten dollars*. But the trouble and injustice do not terminate here; for of course we are next subpœnaed to attend court as expert witnesses, where we may possibly be detained a whole week, and for our testimony we receive no higher compensation than ordinary witnesses. In the language of the Code of Ethics, "Medical men should always be ready when called on by the legally constituted authorities, to enlighten coroner's inquests and courts of justice, on subjects strictly medical, etc. * * * But in these cases, and especially when they are required to make *post-mortem* examinations, it is just, in consequence of

the time, labor and skill required, and the responsibility and risk they incur, that the public should award them a proper *honorarium*" Now I ask, if the paltry sum I have just mentioned, is a "proper *honorarium?*" Is not the enactment of this law a piece of poor and mistaken economy? Is not its tendency to deter physicians from the thorough performance of such public duties, and thus to defeat the ends of justice, instead of promoting them, the very object for which the law was created? Is it not obviously unwise and unjust to impose a responsible and onerous duty upon the profession, and then refuse an adequate compensation? It unquestionably is. It appears to me, then, neither inconsistent with the spirit of our calling, nor with the dignity of this Association, to demand a proper pecuniary recognition for our services. I would therefore respectfully suggest that this matter also be brought to the attention of our Legislature, with a view to amendment.

The Use of Cocaine.

Decidedly there is a future for cocaine. It is destined to have a permanent place in medicine, surgery and dentistry. The scope of its uses are not yet defined, but it is safe to say that its application are widening as experiments with it are extended. We have been especially impressed with this fact in looking over the literature of the subject recently issued by the house of Parke, Davis & Co., Detroit. They have published several most interesting pamphlets. One is entitled "Cocaine in Dental Surgery," another is a working bulletin on the drug containing a variety of original material, and a third a well-composed collation of what has been reported about it in home and foreign medical literature. These pamphlets will be sent without charge by the house to any one mentioning the name of this journal; and they are worth reading by all. The same firm has devised a very handy and ingenious "cocaine case," which they sell at a moderate price, and which impresses us as the best of the kind we have ever seen.—*Philadelphia Medical and Surgical Reporter*, Aug. 29, 1885.

Urethan—A New Hypnotic.

Under the heading of "Therapeutic Notes" (in the *Cincinnati Lancet and Clinic*, October 17th, 1885), call from various French and German journals, we find that Dr. R. v. Jaksch lately studied the nature and action of this new agent, with which Schmiedeberg made the first experiment upon

animals and afterwards Jolly upon man, when it was found that it possesses narcotic properties. Urethan is chemically an ethylic ether of carbonic acid ($NH_2\ CO_2\ C_2\ H_5$) and consists of white crystals freely soluble in water, of a peculiar, though not unpleasant, taste and is perfectly odorless. Jaksch, after first having made a number of experiments upon animals (rabbits), by which he ascertained that urethan possesses toxic effects when given in doses of half a grain to each kilogram of the weight of the body, used this agent 110 times in twenty different persons with the following result: When given in doses of one quarter to half a gram (4 to 8 grains) no hypnotic effect was produced, but when administered in doses of one gram (16 grs.) it invariably caused a sound sleep. It acts principally upon the brain, without, however, having any influence upon peripheral nerves; consequently it proved of no avail against the troublesome cough in phthisis, and the pains of neuralgia. But as it possesses no disagreeable or secondary effects, it may be given in cases where other narcotics are contraindicated as in valvular disease or fatty degeneration of the heart, even in the most aggravated cases. The sleep produced is said to be natural and physiological, lasting until morning, and on awakening leaves no unpleasant after-effects. For this reason v. Jaksch is of the opinion that it will be of special service in the practice among children, and also for delirium tremens and other forms of mania. Urethan may be administered without any corrective, as it is almost tasteless and freely soluble, but for sensitive individuals any excipient may be added. It may be given in the form of powder or in solution.

Medicines which Stimulate the Liver.

In the *American Medical Digest* for October 15th, 1885, we find the following summary of current opinions regarding the action of certain remedies claimed to stimulate the functional activity of the liver:

Podophyllin in small doses is a stimulant to the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Euonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic stimlant. It also stimulates the intestine, but not nearly so powerful as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerful as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic, as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic, as well as intestinal stimulant.

Menispermin does not stimulate the liver. It slightly irritates the intestinal glands.

Babtisin is a hepatic, and also an intestinal stimulant of considerable power.

Phytolacin is a hepatic stimulant of considerable power. It also slightly stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonia is credited with cholagogue properties, but it is questionable; nevertheless, it certainly stimulates the intestinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still *sub judice.*

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potash is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxicum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrate of potash, and hard soap, have each some stimulant action on the liver.

Book Notices.

Complete Pronouncing Medical Dictionary. By JOSEPH THOMAS, M. D., Author of the System of Pronunciation in Lippincott's *Pronouncing Gazeteer of the World,* and *Pronouncing Dictionary of Biography and Mythology,* etc. Philadelphia: J. B. Lippincott & Co. 1886. Cloth. 8vo. Pp. 844. Price not stated. (For sale by West, Johnston & Co., Richmond.)

Its title-page tells what is in this book. It embraces "the terminology of medicine and the kindred sciences, with their

signification, etymology and pronunciation." The Appendix comprises "an explanation of the Latin terms and phrases occurring in medicine, anatomy, pharmacy, etc., together with the necessary directions for writing Latin prescriptions," etc. Compared with the standard "Dunglison's," it is not as rich in synonyms, seldom giving the German and French. In definitions, it is generally very good. An easy revision of the book would make it the superior of any current medical dictionary, and would establish it at once as the standard, both for students and practitioners. As it is, it is an essential companion of "Dunglison's," though perhaps not so intended. It contains many words not found in that well-established work. The typography is better. Some of the efforts to give too literal translations we think rather confusing than beneficial. For instance, we think a better definition of *flexor longus digitorum pedis* would have been long flexor of the toes, than of the "fingers of the feet." One stops to notice the peculiarity of expression, while he gets no better idea by the term "fingers of the feet."

The Ten Laws of Health. By J. R. BLACK, M. D. 12mo. 1885. Philadelphia: J. B. Lippincott & Co. Pp. 413. Cloth. Price $2. (For sale by West, Johnston & Co., Richmond, Va.)

This is the third and enlarged edition of a work which, according to the author, tells "how diseases are produced and prevented," and is further described by him as a "family guide to protection against epidemic diseases and other dangerous infections." If these promises as to its value are fulfilled, the work is indeed one to be highly commended as something quite out of the common run. This is a point which must be settled by each reader, to his own satisfaction. The author endeavors to present the "germ theory" in such a way as to make it familiar to the general reading public, and being enthusiastic as to the benefits which should follow general information on the subject, he really does work this "done to death" matter up in a very pleasant and sufficiently impressive way for the understanding of the non-professional reader. He begins with the statement that all persons ill with infectious disease are breeding hot-beds for germs, and that these germs, being thrown off into food, drink, air, etc., they are safe from detection by any ordinary test, or destruction by any ordinary means; consequently the proper and only place to effectually destroy them is at the

bed-side, before they have passed into the general circulation of the world. He takes great pains to show how this can and should be done, and many words of wisdom are to be found in this portion of the book mingled with many loose generalities. No possible fault can be found with the author in his attempt to present to the public correct information as to prophylaxis, etc., and he has a certain style of writing which would naturally impress the general reader with the idea that he had found what Pilate looked for in vain—truth; and so much of the book, setting aside its faults, must prove of benefit to those who examine it, that it is our duty to commend it to the public. There is a great lack of good books of this kind, and we are glad to welcome an addition to their ranks one which has a great deal of merit, notwithstanding a few easily remedied faults. Its lack of index reduces its value in a considerable degree. C.

The Basic Pathology and Specific Treatment of Diphtheria, Typhoid, Zymotic, Septic, Scorbutic, and Putrescent Diseases Generally. By GEO. J. ZIEGLER, M. D., late Physician to the Philadelphia Hospital, etc. 12mo. 1884. Philadelphia: Geo. J. Ziegler, M. D. Pp. 225. Cloth. Price $2. (By mail from the Author.)

Dr. Ziegler, in this monograph, has endeavored to prove that all diseases classed as above are either dependent upon or complicated with "one common basic, alkaline, pathogenic factor, mostly the volatile organic alkali—ammonia." He thinks that this alkali, being incidental to all forms of life, and differing only in the complications arising from the different ætiological and pathological conditions, must be decomposed, neutralized, or removed, and that this can usually be effected by agents having the power of counteracting it, either acidulous, resolvent or anti-alkaline; in this manner simplifying the general problems of hygiene and therapeusis, and giving more definiteness to both preventive and curative medicine. He gives this theory as the result of years of study, experience and clinical observation, and argues that it is in direct accord with science and truth. Quotations from the writings of medical authorities are frequent in the book, but they refer in the main to side issues—not to the great idea of the author—that of there being one basic alkaline factor upon which the class of diseases referred to is dependent. As to whether he proves his point or not, that is a question which must be left to the general reader to answer, if the latter has the time and patience necessary to thoroughly examine the book. If the contents of the work

were infinitely more valuable, it would still be almost worthless as a book, in that it has no index. C.

A Guide to the Diseases of Children. By JAMES FREDERICK GOODHART, M. D., F. R. C. P. Assistant Physician to Guy's Hospital, and Lecturer on Pathology in its Medical School, etc. Revised and edited by Louis Starr, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. 12 mo. With Formulæ. Philadelphia: P. Blakiston, Son & Co., 1885. Pp. 738. Price, Cloth, $3.00. Sheep, $4.00. (For sale by West, Johnston & Co., Richmond, Va.)

As the American reviser surmises, this work was evidently originally intended to fill a gap existing between the brief handbook and the exhaustive treatise on the subject, and, as far as we are able to determine, the hitherto unoccupied position has been well filled. The diagnosis and treatment of children's diseases is something entirely different from the same things in the adult, as every practitioner can testify, and a work of this kind has always a certain value, even if only a bare compilation. In the volume before us, however, the author plainly states the scope of his work; thus, he writes only upon those diseases which seem incidental to children or childhood, or such points in disease as appear to be peculiar to this stage of life, and his long experience in treating sick children at Evelina Hospital, in London, has made him a master in pediatrics. Every young physician should read the introductory chapter—it contains so much excellent advice as to the examination of infantile patients. If every reader of this book could but remember the axiom Dr. Goodhart lays down in this connection—that "proper feeding ranks first in all treatment in early life"—it would prove of benefit for the next generation to have the book well distributed among this one. He intends the work only to supplement the many treatises on children's diseases now before the profession, but we doubt if many of the works he so modestly praises in comparison with his own, offer more that is practically valuable to the physician in active practice. C.

A Practical Treatise on the Diseases of the Ear. By D. B. St. JOHN ROOSA, M. D. LL D. Professor of Diseases of the Eye and Ear in the New York Post Graduate School and President of the Faculty, etc. 8vo. Sixth edition—Revised and enlarged. New York: William Wood & Co., 1885. Pp. 718. Price, Cloth $5.50, Sheep, $6.50. (For sale by West, Johnston & Co., Richmond, Va.)

The eleven years elapsing between the first and this

edition of this book, have been years of so much progress in medicine that there could hardly fail to have been the natural proportion of that progress in the department of otology, and as occasion demanded the author has presented new editions.

None however, notwithstanding their apparent perfection at the time of issue, compare with this volume as a complete treatise on those affections of the ear met with in ordinary practice. The book, although written by a specialist, is so presented that the general practitioner will be likely to reap the most benefit from it on reading—it is so filled with the little practical observations usually sought after and rarely found by the physician in ordinary practice.

The qualification of Dr. Roosa, which gives him the right to offer such a work to the profession, is based upon the fact of his examination and treatment of over twelve thousand cases of disease of the ear, and by virtue of his success he easily stands among the first otologists of the world. To those interested in medical history, the first chapter in the book, on the progress of otology, will prove of considerable value, as the author has taken pains to make it full and complete—appending an excellent bibliography. The second chapter—on the examination of aural patients—should be read by every practitioner, there is so much in it practically valuable. Of the other chapters it seems difficult to select any one more useful in its teaching than another, all being filled with the latest and best knowledge that years of experience and study can furnish. Every physician who can should have Dr. Roosa's book at hand for frequent reference. C.

Our Bodies and How We Live. By ALBERT F. BLAISDELL, M. D., 12 mo. Boston: Lee and Shepard, 1885. Pp. 285. (By mail from Publishers).

This is intended by the author to be used as an elementary text-book of physiology and hygiene in common schools, and in it he makes special reference to the effects of stimulants and narcotics upon the human system, showing in plain terms the injuries resulting from the employment of tobacco, alcohol, etc. Dr. Blaisdell has written the book in what he calls a "simple and homely style," that it may be more readily understood by students of the age for which it is intended, and the style is an excellent one for that purpose.

It is really a pity that such books are not more used in

schools than is the custom. There can certainly be no more entertaining study, it seems to us, than that of the body itself. The laws of health are violated to the great extent that every doctor sees, both by men and women, often because these same persons received in early life no instruction as to the proper care of their bodies; and for that reason every work like the one in question, which shall teach the coming generation how better to care for themselves, is one of value to the whole community. There can never be too many such books published if they are utilized as text-books in school life. In the work before us we find a great deal to commend, notwithstanding our opposition to some of the author's views on stimulants and narcotics, and we should like to have every intelligent person read chapter XIII, on "simple matters of every-day health"—there is so much practical sense exhibited in it. A most excellent feature of this book is the chapter describing a series of practical, physiological experiments, which in the main require little apparatus, and only a slight previous laboratory experience, to perform. They can not fail to prove of interest to the student. A good glossary accompanies the subject matter, adding much to its value. C.

Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M. D., F. R. C. P. Professor of Obstetric Medicine in King's College, etc. Fourth American from Fifth English Edition. *With Notes and Additions*, by Robert P. Harris, M. D. With three plates and 201 illustrations. Philadelphia: Lea Brothers & Co., 1885. Leather. 8vo. Pp. 663. (For sale by West, Johnston & Co., Richmond.)

Playfair's *Midwifery* has become so well established in the esteem of American practitioners, as shown by the popularity of the former editions, that it is altogether sufficient, to secure a rapid exhaustion of the present edition to state, that before going to press this time both the author and the American editor carefully revised the work and have brought it up to the latest day possible. It is almost invaluable as a text-book, while for the practitioner it furnishes an excellent guide. Although crowded with titles, Dr. Playfair is a plain-spoken, practical teacher, and his work may be relied on as authoritative.

Malaria. By JAMES HENRY SALISBURY, A. M., M. D. (*McNaughton Prize Essay*, 1882, Awarded by the Albany Medical College Alumni Association). New York: Wm. A. Kellogg. 1885. Cloth. 8vo. Pp. 152. (From Author.)

This essay must take rank among the leading studies re-

cently made on the subject. There has not been in the field of investigation a more systematic, pains-taking student after the truth, nor one more competent to judge of the facts brought to light. The author has long since "ceased to regard all the bacilli, micrococci and bacteria, etc., as ultimate forms of animal life." He looks to the fully developed sporangia as the true plant as the vegetation which seems to be connected with ague. The book is handsomely issued, and contains ten full page elegantly executed plates illustrative of the text and containing explanations of the dozen or more figures on each page.

Treatise on Practical Chemistry and Qualitative Inorganic Analysis. By FRANK CLOWES, D. Sc. Lond., Professor of Chemistry at the University College, Nottingham. With illustrations. From Fourth English Edition. Philadelphia: Lea Brothers & Co. 1885. Cloth. 12 mo. (For sale by West, Johnston & Co., Richmond.)

The special aim of the author has been to make of this a practical text book on chemistry, adapted for use in the laboratories of colleges and schools, and has hit his mark. Plain directions are given to explain away the confusion which is often added to by chemistry book-makers by their too exclusive use of technicalities. This book will prove of the greatest service to any practical chemist—whether he adopts it as scholar or teacher. We commend it most cordially to any one in need of such a work.

Text Book of Physiology. By M. FOSTER, M. A., M, D., F. R. S. etc. Third American, from Fourth and Revised English Edition. *With Extensive Notes and Additions*, by Edward T. Reichert, M. D., Demonstrator of Experimental Physiology in University of Pennsylvania, etc. With 271 Illustrations. Philadelphia: Lea Brothers & Co., 1885. Leather. 12 mo. Pp. 911. (For sale by West, Johnston & Co., Richmond.)

Foster's *Physiology* was introduced only a few years ago when a text-book on the subject was specially demanded. There were several competitors at the time; but because of its superior merits, it at once got the run, and has so far distanced them that they are no longer in the field. This work is now the established text-book of nearly all the medical colleges of the country. Each edition is made to keep fully abreast with the latest discoveries. The American Editor introduces sections on the "physiological *anatomy*" of almost every organ and tissue whose functions are described; they are embraced—as are all of his other notes—in [ ]. No practitioner can well afford to own less of a text-book than this.

Elements of Modern Medicine, including Principles of Pathology and Therapeutics, with many Useful Memoranda and Valuable Tables for Reference. By R. FRENCH STONE, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine, Central College of Physicians and Surgeons, Indianapolis, etc. New York: D. Appleton & Co., 1885. Long 12 mo. Pp. 368. (For sale by West, Johnston & Co., Richmond.)

This is a nicely bound flexible cover, leather-flap or tuck, pocket-book, too bulky to be carried about conveniently, containing undoubtedly much valuable information, but, being without index, in a form not easily accessible. Such a book is intended for ready reference. It does not meet this want. The subjects are not even alphabetically arranged. The book has pockets in front and at the end, in one of which are a number of very useful clinical charts, arranged for memoranda of morning and evening temperature, pulse, respirations, diagnosis, treatment, results, etc.

Tabulæ Anatomicæ Osteologiæ. Editæ a CAROLO H. VON KLEIN, A. M., M. D., Dayton, Ohio. Cincinnatti: Cincinnatti Lithographic Co. 1885. Quarto. (From Author.)

This volume of thirty-two full quarto-page plates—each plate containing from twelve to twenty finely executed lithographic figures on heavy plate paper—must be ranked as a standard from the moment of its issue from the press. It has very little text matter—a hair line running from the point in the figure to be illustrated to the technical anatomical Latin name on the margin of the page. These "tables" cover every point in osteology, and are specially valuable to professors and students of anatomy.

Hand-Book of Diseases of the Skin. Edited by H. V. ZIEMSSEN, M. D,, Professor of Clinical Medicine in Munich; Editor of Ziemssen's *Cyclopædia of the Praatice of Medicine*, etc. Illustrated with 80 Wood Engraving and Color Prints. New York. Wm. Wood & Co., 1885. Cloth, 8vo. Pp. 658. (From Publishers.)

The mention of this book will be a source of pleasure to all subscribers of *Ziemssen's Cyclopædia*, as a copy will be presented to each subscriber on notifying the publishers of his present address, together with his address at the time he subscribed. For some unaccounted reason, the chapter on skin diseases were not written in time for insertion in their assigned place in the *Cyclopædia*. The volume as now presented comprises contributions from the leading teachers of

dermatology in Germany, and is an excellent work. The publishers richly merit the patronage of the profession for their generous gift to it.

Hay Fever and its Successful Treatment by Superficial Organic Alteration of the Nasal Mucous Membrane. By CHARLES E. SAJOUS, M. D., Instructor of Rhinology and Laryngology in Post-Graduate and Spring Courses, Jefferson Medical College, etc. Illustrated with 13 Wood Engravings. Philadelphia: F. A. Davis, Att'y., 1885. Cloth. 12 mo. Pp. 103. (From Publisher.)

This "essay" bring the subject up to the most recent advances, and concludes, so far as treatment is concerned, that all abnormal conditions of the nasil cavities, such as hypertrophies, exostoses, etc., should be removed before the superficial cauterizations; that the cauterizations produce best results when begun six weeks before the annual onset; that the treatment can be conducted during a paroxysm, and that immunity against hay fever depends upon the thoroughness with which the treatment is conducted. The cure of hay fever must rank as one of the wonderful advances in medicine during this era.

Treatise on Epidemic Cholera and Allied Diseases. By A. B. PALMER, M. D., LL. D., Professor of Pathology, Practice of Medicine and Clinical Medicine in the College of Medicine and Surgery in University of Michigan, etc. Ann Arbor, Mich.: Register Publishing House.. 1885. Cloth. 12 mo. Pp. 224. Price $1. (From Publisher)

This book, issued from the press in August, was distributed too late in the season of danger to be of special value this year. But the succinct history it gives of the epidemic disease from its earliest mention, the well drawn clinical descriptions of the attacks, the prophylactic suggestions and the well founded therapeutic recommendations combine to make this a valuable treatise to the student, and to the practitioner for a future epidemic. Short chapters or sections are added on some of the allied diseases, such as "summer diarrhœa," cholera morbus and cholera infantum. The chapters relating to the history and prevention of cholera are written in language intelligible to the general reader.

Berlin as a Medical Center. By HORATIO R. BIGELOW, M. D., Washington, D. C., Sandy Hook, Conn.: New England Publishing Co., 1885. Cloth. 16 mo. Pp. 117. (From Publishers.)

This "reprint" of a series of letters which have been pub-

lished in the *New England Medical Monthly* is a faithfully prepared, practical "guide for American practitioners and students" who intend visiting Berlin. It gives names and locations of hotels, colleges, hospitals, etc., etc., and also states the necessary expenses.

Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits. Illustrated by Numerous Cases and Engravings. By WILLIAM ROBERTS, M. D., F. R. S., F. R. C. P., etc. Professor of Medicine at the Victoria University, etc. Assisted by ROBERT MAGUIRE, M. D., Member Royal College of Physicians, etc. Fourth Edition. Philadelphia: Lea Brothers & Co. 1885. Cloth. 8vo. Pp. 628. (For saie by Messrs. West, Johnston & Co., Richmond.)

Each edition of this standard work has been an improvement upon the former in the way of suitability for practitioners. Necessarily there is much in the accurate description of a physical fact which, to be of service at the bedside, must be kept in memory. The clinical cases added to many sections very materially aids in this direction. The chapters on albuminuria and on micro-organisms in the urine have been entirely re-written. The constant aim of the author has been to make the book a valuable guide to the clinical student. It is undoubtedly the most generally accepted standard work on the subjects treated of that there is in this country. The microscopical descriptions—both cuts and text—are well given. The general treatments advised are all based on established authority or on sufficient clinical experience. We do not see how any general practitioner of medicine can afford to be without this book. It is also either the text-book or the reference-book in most of the medical colleges of the country that have a special chair for renal and urinary diseases.

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter-stamp for pamphlet to the respective authors named.

Hyperæsthesia. By JAMES T. SEARCY, M. D., Tuskaloosa, Ala. [A most excellent treatise on this much misunderstood subject. The paper shows a great deal of thoughtful consideration.] (Reprint from the *Transactions of the Medical Association of Alabama*, April, 1884.) Pp. 25.

Cases of Reflex Cough Due to Nasal Polypi: With Remarks. By JOHN N. MACKENZIE, M. D., Surgeon to the Eye, Ear and Throat Charity Hospital, Baltimore, Md. [Like all

of Dr. Mackenzie's monographs—well worth reading.] (Reprint from the *Transactions of the Medical and Chirurgical Faculty of Maryland*, 1884.) Pp. 8.

Ovariotomy. By JAMES B. HUNTER, M. D., Surgeon to the Woman's Hospital, etc., New York, N. Y. [A first-class manual of this operation—from the prefatory to the after treatment of a patient. A pamphlet to be read and kept.] (Reprint from the *N. Y. Medical Journal*, June 7, 1885.) Pp. 18.

Obstruction of the Gall-Duct, etc. By J. McF. GASTON, M. D., Atlanta, Ga. [This little *brochure*, besides giving an excellent account of the symptoms, etc., of this unfortunate affection, presents plainly the details of what the lamented Gaillard called "Gaston's operation."] (Reprint from *Gaillard's Medical Journal*, October, 1884.) Pp. 23.

Sanitary Suggestions on How to Disinfect Our Homes. By W. B. PALMER, A. M, M. D., Detroit, Mich. [A resumé of the latest and best information concerning the household use of disinfectants, deodorants and antiseptics, and of general precautions of practical value in reference to infectious diseases.] Pp. 58. Price, 25 cents.

Endometritis Fungosa. By JAMES B. HUNTER, M. D., Surgeon to the Woman's Hospital, New York City. [A full and carefully considered monograph on the pathology, diagnosis and treatment of this uterine affection.] (Reprint from the *Medical Record*, April 25, 1885.) Pp. 16.

Deviation of the Nasal Septum. By J. W. GLEITSMANN, M. D., Instructor in the New York Polyclinic, etc. New York city. [An article worthy the attention of all interested in the study of nasal deformities.] (Reprint from the *American Journal of Medical Sciences*, July, 1885.) Pp. 11.

An Accidental Divulsion of a Pterygium Leading to an Improvement in the Regular Operation. By A. E. PRINCE, M. D., Jacksonville, Ill. [The accident detailed by the writer has resulted in his improvement of the old strabismus hook, which certainly makes the operation apparently much easier and simpler.] (Reprint from the *Archives of Ophthalmology*, Vol. XIV., No. 1885.) Pp. 5.

Bacterial Pathology. By WATSON CHEYNE. Illustrated with over thirty engravings. [This pamphlet comprises a series of papers written on the biological laboratory exhibits at the last International Health Exhibition.] (Reprint from the *London Lancet.*) New York: Industrial Publication Co., 1885. Price twenty-five cents. Pp. 43.

VIRGINIA MEDICAL MONTHLY,

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RICHMOND, VA.

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LANDON B. EDWARDS, M. D.....EDITOR AND PROPRIETOR.

Original Contributions solicited from all sections; but the Editor does not hold himself responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

Virginia State Board of Medical Examiners—New Appointments.

The following gentlemen have been commissioned by the Governor to fill heretofore existing vacancies in the State Board of Medical Examiners: *Dr. Thomas J. Moore*, of Richmond, Va., as one of the two Examiners from the State-at-large, *vice* Dr. F. D. Cunningham, deceased; *Dr. Hugh M. Taylor*, of Richmond, Va., one of the Examiners from the Third Congressional District, *vice* Dr. O. A. Crenshaw, resigned; *Dr. Herbert M. Nash*, Norfolk, Va., one of the Examiners from the Second Congressional District, *vice* Dr. T. B. Ward, deceased. Dr. Moore has been assigned to the Committee on Surgery; Dr. Taylor to Anatomy, and Dr. Nash to Physiology.

When Dr. Ward died, six months ago, the Executive Committee of the Medical Society of Virginia nominated Dr. James Parrish, of Portsmouth, Va., to fill the vacancy. After waiting for several months, it was found that he had no qualified. During the late session of the Medical Society of Virginia, Dr. Nash, who was not in attendance, was nominated, without opposition, to the Governor to fill the vacancy. During the session of the following night, upon representation by Dr. S. K. Jackson that Dr. Nash was "irregular" in practice, etc., Dr. Nash's nomination was withdrawn by the Society and Dr. Meade C. Kemper, of Norfolk, who was also not in attendance, was duly nominated to the Governor for the place. As soon as Dr. Kemper

was notified of his election by the Secretary of the Society, he forwarded his resignation in these words: "I herewith tender through you to the Governor or the Executive Committee of the State Society, my resignation of the more than doubtful honor thus conferred upon me. I am not a little indignant that my personal friends could have been so mistaken in me as to suppose that I was willing to profit by a vile slander upon a professional brother." Accordingly, the Governor appointed Dr. Nash, than whom there seems to be no purer, truer professional man in Norfolk. Members of the Society everywhere seem proud of the magnanimous course pursued by Dr. Kemper, and are glad the Governor undid the wrong that the Society was misled in doing Dr. Nash by the remarks of Dr. Jackson during the session.

Materia Medica Collection for Pharmacal and Medical Students.

The ever enterprizing firm, Messrs. Parke, Davis & Co., of Detroit, Mich., offer a handsomely arranged case containing 288 specimens of *all* the crude drugs of vegetable origin recognized in the United States Pharniacopœia, and many not so recognized that are in common use, for the very moderate price of $10. This collection furnishes the indispensable supplement to such text-books as Maisch's *Manual*, Sayre's *Conspectus of Organic Materia Medica*, etc. Each of the 288 specimens is put up in a little neatly turned wooden box with a label bearing a number which refers to an index or key accompanying the case. Such a collection would seem an essential in the armamentarium of botanical and pharmacological students especially, and a great help to professors and teachers in colleges and schools. As each specimen is selected is of unquestionable authority, this collection would also prove of great value to druggists as a means of testing their purchases of crude vegetable drugs by an authentic standard. Letters of inquiry and orders for the "Collection" should be sent *at once* to Messrs. Parke, Davis & Co., in order that they may know how many cases to have manufactured.

The Lenval Prize-Competition.

1. Baron Léon de Lenval of Nice has offered on the occasion of the Third Congress for Otology a prize of 3000 francs, for the best instrument (easily carried) constructed according to the principles of the microphone for improvement of hearing in cases of partial deafness.

2. Instruments for competition are to be sent before the

31st of December, 1887, to one of the undersigned members of the Jury, appointed by the Third International Congress for Otology.

3. Such instruments only are admitted as are completely worked out. The perfection of the mechanical construction, the right application of the laws of physics, and above all the power of improving the hearing will be taken into consideration.

4. The awarding of the prize will take place at the Fourth International Congress for Otology, to be held at Brussels, September, 1888.

5. Should none of the instruments presented be found worthy, the Jury reserve the right of keeping the competition open until the meeting of the next International Congress for Otology.

The members of the Jury are: Prof. Hagenbach-Bischoff, Ph. D. M. D., Chairman of the Jury, Basle (Missionsstr. 20). Benni, M. D. Warsaw (16 Bracka). Prof. Burckhardt-Merian, M. D. Basle (42 Albanvorstadt). Gellé, M. D. Paris (49 Rue Boulard). Prof. Adam Politzer, M. D. Vienna (I Gonzagagasse 19).

Dr. Rawley W. Martin,

of Chatham, Pittsylvania Co., Va., President of the Medical Society of Virginia, was quite ill during the early part of October, but we are glad to announce he is now recovering. A man of a high order of cultivation in medicine and in letters, possessed of cool, discriminating judgment, and of a conscientious sense of duty, influential for good with all who know him, and having an energy that surmounts all discouragements, the Society has restored the rank of President to its intended rank in electing him to fill it. Under his hands, it will be seen that the Society will make true progress.

The Medical Press of Western New York

is the latest journalistic venture received. Its Editor is Dr. Roswell Parke, of Buffalo, N. Y.—its publication home. The November number is the first issue, and contains fifty-two octavo pages. It is handsomely issued in every way, and the original contributions, correspondence, editorials, abstracts, etc., are all excellent. Price, $2 a year. We take pleasure in placing it upon our exchange list, and shall regularly examine its pages in the confident expectation of being profited thereby.

Clarifying Muddy Water with Alum.

Some of our "city fathers" are remarkably ignorant. It seems that a party came to this city a few months ago, and proposed to put up a filtering "plant," by which the muddy drinking water of James river could be clarified for drinking and domestic purposes. Leaving out of consideration the purely business part of the proposition, which it is not our place to discuss, some of the City Council objected to the proposition because a trace of alum was named as an agent to be used in clarifying the water. The muddy water that is sometimes served from the reservoirs of this city for drinking purposes is as suitable as water freshly stirred up in a mud puddle along one of our country roads. Since there seems to be no disposition on the part of the Common Council to afford relief, it may be well for our physicians to inform their patients that a mere trace of alum in drinking water —especially when used only for a week or ten days at a time —is not injurious to health, and that a *trace* is altogether sufficient to purify such water as we have referred to. The following extract from the *Popular Science News* (which we find in *Albany Medical Annals*, October, 1885), may give information to some, and confirm others in their belief—that alum can be safely used to clarify muddy water, and thus render it fit for the table:

"Those of our readers who have traveled on the Mississippi river know how turbid the water is; and they may have seen people tie a bit of alum to a thread, let it down into a tumbler of water, and swing it about a little, after which operation the fluid becomes as clear as crystal.

"In 1865, Jeunet (*Moniteur Scientifique*) found that four-tenths of a gram of alum to a liter of water (about twenty-three grains to the gallon) rendered it drinkable in from seven to seventeen minutes, even when it was full of foreign matter.

"Recently, Professors P. T. Austen and F. A. Wilder, of Rutger's College, find that two-tenths of a gram to the liter (one and one-fifths grains to the gallon) caused the separation and settling of the impurities in the New Brunswick, N. J., water. This amount of alum is too small to be perceptible to the taste, or to exert any physiological action.

"The alum may also be used in clarifying water by filtration. If a very small amount be added to turbid water, it can be filtered through ordinary paper without difficulty, and yields a brilliantly clear filtrate, in which there is no trace of suspended matter. It is not necessary to let it

stand before filtration, as the action of the alum is immediate.

"The simplest form of filter for considerable quantities of water is a tube, one end of which is stuffed with cotton. A drain-pipe is the best, as it can be easily cleansed. The plug of cotton should be two or three inches thick, and may be kept in place by a ring of wood fitted into the bottom of the pipe. Make a solution of half an ounce of alum in a cup of boiling water, pour this into a quart measure, and fill up with cold water. Fifty-four drops of this solution will contain two and three-tents grains of alum, which is the quantity for a gallon of water. It is not important to be very exact, as twice the quantity would be harmless enough; in fact, Jeunet's rule would call for about ten times as much.

"Analysis shows that the water is not only clarified, but purified by this process, the greater part of the organic matter being removed from it."

Vaccinate at Once.

We cannot too strongly urge upon those whose tendency it is to delay attention to duty that they should lose no time in vaccinating the children born in their practice during the past year or more. Small pox has lately appeared in Newport, R. I., Albany and New York, Newark, N. J., Peoria, Ill., and we have heard of an imported case or two in one of Virginia's cities. The daily papers are reporting the occurrence of cases in many other of our towns and cities; and unless proper precautions be taken at once, it will not be surprising to hear of the development of a disastrous epidemic. It would be well for physicians to exercise due caution in selecting their stock of animal crusts or points, since worthless companies are springing up in several sections of the country which are organized to make money by imposing spurious matter upon the people. We trust that this word of warning will be heeded, and that no unprotected person will be left without vaccination. If a party himself objects to being vaccinated for his own protection, he must be made to learn that by vaccinating him, security is granted to others with whom he is coming in contact.

Ernst Krackowizer Triennial Prize.

At a meeting of physicians and laymen, friends of the late Dr. Ernst Krackowizer, who died September 23d, 1875, held October 13th, 1885, it was resolved, Whereas, during his

long activity in New York city, Dr. Krackowizer rendered eminent services to both the city and medical profession, and was a zealous and self-sacrificing Fellow of the New York Academy of Medicine, that the sum of $1,155 be transferred to the New York Academy of Medicine, and that the accumulated interest of the sum be utilized every three years as a prize for a good or the best paper, essay or book on a medical topic. This prize, it would seem from the announcement as we have read it in the *Medical News* of October 24th, is open to competition from any member of the American profession. The subjects for the prizes are to be published at the proper times in the principal medical journals of the United States.

Medical Faculty of Johns Hopkins University.

It seems to us that slow progress is being made in the way of selecting the Medical Faculty of this wonderfully well-designed institution. Only five professors have yet been named. These are Dr. H. Newell Martin, Professor of Biology, Dr. Ira Remsen, Professor of Chemistry, Dr. William H. Welch, Professor of Pathology; Dr. John S. Billings, U. S. Army, Professor of Public Hygiene, and Dr. Matthew Hay, of Edinburgh, Professor of Pharmacology. These are all excellent selections; we trust those for the practical chairs will be as well made. It has been a long time since any public announcement was issued of the progress made. The prospectus, no doubt, will be published in a few months.

Monthly Epitome of American Practical Medicine and Surgery.

The *Quarterly Epitome* for December, 1885, will complete its sixth annual volume, and will after that date be issued *monthly*—supplementary to *Braithwaite's Retrospect.* The design is a good one, and judging from the able editorial management of the past, we are confident the undertaking will prove popular and useful to the profession. The price will be $2.50 per annum.

To Messrs. William R. Warner & Co., of Philadelphia, Pa., we wish to return thanks for their handsomely issued "Places of Interest in Philadelphia," containing the Programme of Entertainments of the National Wholesale Drug Association, October 20th–23d, 1885.

Cutaneous Anodyne.

Dr. R. G. Couch, of Richmond, Va., recommends the following prescription as one of the best he has ever found as a lotion for itching cutaneous surfaces, whether the skin is broken or not. He has used it with invariable success, and it has now become a popular application with the people as well as the doctors of this city:

℞. Sodæ biborat..... .....ʒj
Acid. carbol.....gtt. xv
Glycerin.....ʒj

M. Sig.—Apply as lotion with camel's-hair brush or by dropping from bottle on the itching surfaces.

Elliott's Medical Saddle-Bags.

Dr. A. M. Fauntleroy, of Staunton, Va., Ex-President of Medical Society of Virginia, writes "To say that I am more than pleased with the Elliott's Patent Medical Saddle-Bags, and I have used them sufficiently long to give me a very high appreciation of their compactness, lightness and convenience of arrangement. These advantages they present in an eminent degree over the styles generally in use.

"Physicians in country and town practice will find them useful and invaluable."

A Virginia State General Hospital.

During the recent session of the Medical Society of Virginia, a number of doctors asked why we did not advocate the establishment of a State General Hospital. We have been advocates of such an institution for so long a while that we can scarcely recall when we began. Since none of our cities have such institutions that are worthy of the name of a town or city hospital, it seems the more incumbent upon the *State* itself to make the departure from the old style, and establish a hospital for the care of its sick citizens. Virginia is doing well in the matter of insane asylums. Soon she will have four—one being exclusively for the colored race. The same principle which moves her to so act in regard to her citizens who are mentally diseased, should lead her to provide as well for those who are physically disabled. If it rends the heart to see the madman raving in our streets, and awakens the sympathy so as to provide tenderly for his condition, does it not unstring the hardest heart as well to know that there are more sufferers on beds of languishment who are left unprovided for—men and women and children who

are reduced to the most abject condition of poverty and distress simply for the lack of the same kind of provisions for them that is made for those hopelessly insane and who cannot be of any more consequence to their families and to the Commonwealth? The *humanitarian* view is as forcible for the physically sick as for the insane.

From the *economic* point of view, the facts are altogether in favor of establishing a State General Hospital. The better provisions that can be made for the indigent sick in a hospital than in their destitute homes, and consequently their more speedy recovery of health, and earlier return to the activities of life, would prove th be an immense pecuniary saving to the Commonwealth.

The immediate outlay for buildings and for current running expenses need not be a large sum. The State already owns a suitable building in this city in which to begin, and an appropriation of $12.000 or $15.000 for the first year, we imagine, would be sufficient. As for able visiting physicians and surgeons and house physicians and surgeons, they can be easily secured at very small expense to attend the hospital wards. In such a measure, we see no reason to anticipate differences between professional men. It cannot in any manner be in conflict with any of the legitimate interests of any educational enterprize. On the contrary, the medical colleges of the State would be benefited, since the house of physicians and surgeons would almost invariably be some of their recent graduates. Nor can it lessen the paying practice of physicans throughout the State.

The suggestion at this moment as to a State General Hospital seems timely in that the Legislature of Virginia is to assemble in December; and if an effort is to be made, work should be begun at once upon the Legislators elected November 3rd, 1885.

Virginia State Board of Health.

A State Board of Health was organized in 1871, according to the legislative enactment; but the same Act that created the Board rendered it helpless to accomplish any good, by providing "the said Board shall not be an expense to the State." For a year or two, earnest effort was made to have this paralyzing clause removed, but without effect. The excellent selection of Dr. James L. Cabell, of the University of Virginia as President of the Board could not have been improved; for so well recognized is his special ability in the line of State Health, that no sooner was the National

Board of Health organized than he was elected its President. If the Legislature during its early session will only remove the clause in the Act which obstructs the usefulness of the Board, and will grant it only $5.000 or $6.000 a year, we venture nothing in the assertion that ten times the amount expended will be returned to the State in prevention of preventable diseases and disorders. The great benefit to other States where such Boards are established upon a working basis should serve as a proof to the members of the General Assembly of Virginia that like good results would come to this State if the proper expenses of its State Board of Health were paid out of the State Treasury. We appeal to our Virginia subscribers to properly instruct their corporation and county legislators elect on this subject. Do not forget that if these measures are not secured during the approaching session, it will be two years before the Legislature will assemble again. Each legislator is more or less under the influence of his doctor; let that doctor exercise that influence at once for the good of the Commonwealth generally. The opportunity to do good is at hand; do not triffle it away.

The Classes of the University of Virginia and of the Medical College of Virginia,

we learn, are as large as usual. It is a pleasure to note the success of these State institutions, when they are intent upon protecting the standard of graduation of the students. The Demonstrator of Anatomy at the University of Virginia, Dr. Wm. B. Towles, we learn is temporarily filling the chairs made vacant by the death some months ago of Prof. J. Staige Davis. We learn that the present Board of Visitors will not go into an election ofa Professor this year.

The Transactions of the Medical Society of Virginia, 1885,

have just been put to press. They will form a voulme of larger size than ever before, and will contain papers of practical value and interest. The Publishing Committee hope to have the volume issued before Christmas.

Oculists

are requested to note that Dr. M. Landesberg, No. 40 West Thirty-fourth street, New York, N. Y., is reporting on progress in ophthalmology in the United States for *Revue Générale d' Ophthalmogie*, of Paris, and to send him copies or reprints of their publications, from which to compile his reports.

Medical Library of Dr. Wm. H. Coggeshall.

Many valuable books in the library of our late associate yet remain unsold. Letters or postals of inquiry—naming the books wanted, etc.—if addressed to Mrs. Wm. H. Coggeshall, 416 West Clay Street, Richmond, Va., or to the Editor of the *Virginia Medical Monthly*, will receive prompt attention.

Obituary Record

Dr. Jacob Newton McChesney.

The following sketch of the life of the late Dr. Jacob Newton McChesney was read at the meeting of the Manhattan Medical and Surgical Society, October 3rd, 1885, by Charles W. Allen, M. D., of New York city, and is published by request in this journal. It is a handsome tribute to a worthy young Virginia physician, who was honoring his native State when the death-shaft struck him.

Gentlemen of the Society :

You have desired me to prepare a memorial sketch of the life and work of our lamented friend and colleague, Dr. Jacob Newton McChesney.

It was a gratification to me that I had been thus honored by the choice of the Society, and I received the request with emotions of mingled pleasure and sadness. I regarded it as a recognition, on the part of the Society, of the esteem in which I held Dr. McChesney, and of my right, as his earliest associate in New York, and of one who loved him well in life, to speak a word of love and sorrow as I relate the short story of that life. It was, however, with a full sense of my lack of requirements for such a duty that I accepted it. Others could have written more eloquent words, and done greater justice to his character and life; but none could, more keenly, have regretted the untimely termination *of that life* nor more justly have appreciated the true nobility of *that character.*

It was only a little more than a year ago that Dr. McChesney stood before this Society and told of the life of Dr. Mott, with its struggles and trials, its successes and disappointments, and its early and peculiarly sad termination. To-night, gentlemen, his seat too is vacant, and I have the same sad story to repeat of him. A story of early struggles, of

untiring work, of devotion to and love of his chosen profession, of self-sacrifice, of courage in meeting and overcoming obstacles, until overcome at last by dire disease in the uneven combat to which their lives were consecrated. But they are not *dead!* They have merely given way to nature's processes and passed on to an eternity of *life.*

> "There *live* our dead within their native *sky,*
> While we remain below and daily *die.*"

Affection is always prone to call forth eulogy of an exaggerated type, but as Hawthorne has said, "Death is so *genuine* a fact that it excludes falsehood, or betrays its emptiness; it is a touchstone that proves the gold and dishonors the baser metal."

The subject of this sketch was born in 1852 at Staunton, Va., and was the second son of the late Dr. Wm. S. McChesney, who recently died in that city. He received his literary education at the Washington and Lee University and afterwards studied medicine at the University of Virginia. He then came to New York and entered as a student at the Bellevue Medical College, where he took his degree in 1875. Returning to Staunton, he began at once the practice of his profession in association with his father.

After some three years of practice, in which he found abundant opportunity to exercise his skill, but which required constant and arduous labor, was poorly requited, and for which even small fees were difficult of collection, he determined to seek a broader, and if possible, more profitable field. Not that he practiced for gain, but at the same time that he was ambitious not to become buried in such a practice, he recognized the necessity of placing himself where a just return for his services could be made. During the few years of his stay in the South he had frequent opportunity to treat surgical cases, and he acquired an excellent reputation as a careful and skillful operator. He was here, as in after life, ever a true friend to the poor and unfortunate, and never was a case disregarded because he knew he would receive nothing for his services. He would sacrifice rest, comfort, pleasure, everything, when there was suffering to relieve or good to be done. No matter whence the call, it was, for him, ever a call to duty.

He became a favorite with all classes, but especially with the very poor, to whom his gentle, sympathetic manner seemed as great a boon as his knowledge and skill really were. In many a lowly hut in Old Virginia to-day his name

is recalled with love and reverence. It is the only payment they can make, but how much more precious than gold! Blessings preceded and followed him. His treasures were laid up on high.

Much to the regret, therefore, of a large class who had learned his worth and discovered his ability and skill, he decided to try his fortunes in New York city. He did not know what course he should pursue here, but he had that element of success in his nature and make up which usually prevails; a manly pluck and a determination to do to the best of his ability. His available funds upon arrival amounted to less than one hundred dollars, but he brought a stout heart, a consciousness of right, and a stewardship so far faithfully performed.

In the spring of 1878 the announcement was posted on the college bulletin-boards that a competitive examination was about to be held for the positions of House Physicians and Externes to the Work-House and Alms-House Hospital on Blackwell's Island. This was to be the first in order of the spring hospital examinations, and he decided to go up for it. He passed an excellent examination, as I learned at the time, and was given his choice of service. He chose the position of House Physician at the Work-House Hospital with a six months' service, and I became Externe and succeeded him at the expiration of this term. Previous to this year these services had been a part of Charity Hospital, but had now been made into a separate hospital, with a regular staff of visiting physicians and surgeons.

During the time we were here associated, I had an excellent opportunity to learn the true nobility of his character. His high sense of honor and justice were early apparent. His desire to do his work thoroughly, and do full justice to the unfortunate ones entrusted to his care, marked his entire term of service. At all times kind and courteous, he became almost unceasing in his efforts in behalf of the wretched creatures who for the main part filled our wards. His form was almost as familiar a sight to the sufferers who tossed on sleepless beds of pain at night, as to those who watched for his daily visits.

He was active in bringing about reforms for the benefit of the prisoners as well as for the hospital patients, and in stamping out abuses which had crept into the service. When occasion required it he could be firm even to severity. Malingerers and those attempting any dishonesty, found that he was not a man with whom to trifle. Those needing counsel

or assistance among the inmates, found in him a friend, and he was very generally respected and obeyed. The friendship here formed between us, increased as year succeeded year, and although our duties separated us widely at times, I was enabled to watch his course, and note with pride and satisfaction, that he was constantly showing my estimate of his character to have been just.

Upon the expiration of his service on Blackwell's Island, he was chosen by the Commissioners as the man best suited to reörganize the hospital service on Hart's Island, in which various abuses were believed to exist. Just such a man was needed to bring about a better state of affairs in this institution. He would not tolerate wrong, nor would he associate with wrong-doers, and when he found that one of the physicians on duty at Hart's Island was not a reputable member of that profession which he himself honored, and considered it a privilege to honor, he caused him to be dismissed, though not without difficulties and disagreeable experiences.

Here again he was the champion of the wronged, and made enemies for himself by espousing the cause of those, who, without his aid, would have wrongly suffered.

In 1880, he received from the Board of Health the appointment of Assistant Physician to the Hospital for Contagious Diseases, and left the Hart's Island Hospital a purer spot than he had found it.

He entered upon this new field with characteristic energy and zeal, and rendered most valuable services, especially during the epidemics of variola and typhus. There was a vast amount of work accomplished in the Spring and Summer of 1881, and it was at this time that Dr. Mott entered the service, and took charge of the typhus cases.

In the midst of the small-pox epidemic, Dr. McChesney received an appointment on the Vaccinating Corps, but he was detailed to the hospital to continue the excellent work on which he was then engaged, until the epidemic should cease. He here acquired great familiarity with the various forms of contagious disease, and he made the most of his opportunities for observation and study. The results of a part of his labors are embodied in a paper which he prepared by request for the *Medical Record*, and which appeared first in the number of March 31st, 1883, and continued through the two succeeding numbers. This paper, which is a valuable addition to the literature of the subject, shows much careful study and keen observation. It was very well received by the profession, and largely quoted. He came to be looked

upon as an authority on contagious diseases, and was subsequently advanced to the position of Sanitary Inspector for Contagious Diseases, which position he held up to the time of his death.

His whole work in the Health Board was characterized by energetic devotion to duty and self-sacrifice. Twice he had the misfortune to suffer from the diseases by which he was so constantly surrounded. Early in 1881, while attending a number of unusually malignant cases of small-pox, he developed symptoms of the disease, and although no eruption ever appeared, the symptoms and course were such as to cause the physicians who attended him, as well as those called in consultation, and himself, to look upon it as the rare form of *variola sine exanthemata*. At another time he contracted a severe purulent ophthalmia, which required the most constant watchfulness on the part of both physicians and nurses to prevent permanent injury to the eyes. Aside from these constant dangers and the arduous labors of the position, his life in the Board of Health was not altogether a bed of roses, especially after leaving the Hospital. "Virtue itself 'scapes not calumnious strokes." The very faithfulness with which he executed his duties became a cause of envy and enmity with some whose record of work did not compare favorably with his. Here, as before, his native love of honesty asserted itself. So honest was he himself, that he could not tolerate dishonesty in others, and his outspoken disapproval of wrong, and freely-expressed opinions of the actions of others, brought him at times into positions which he would gladly have avoided, for nothing was more foreign to his nature, nor more distasteful to him, than discord and contention. Here again he upheld the dignity of his calling, when, by some chance, a man was appointed by the Board whom he knew to be unqualified, and without a medical diploma, he did not rest until he had convinced the Board of their mistake, and they had nullified the appointment.

Being, therefore, a man of power, and an honest man, he was not without enemies. Some one has said, "A man must be somebody in order to have enemies;" one must be a force before he can be resisted by a force. Here was a force always exerted in favor of the right and to oppose the wrong.

Those who *knew* him admired, respected, loved him; and some of his avowed enemies finding that he had right on his side, became his greatest admirers and warmest friends. When himself at fault, as he sometimes discovered himself

to be, he would, in a manly, straight forward manner, acknowledge the wrong, and make due reparation.

It was in the execution of his duties in the Vaccinating Corps, and as Inspector of Contagious Diseases, that he probably laid the foundation of his last illness. No man probably ever worked harder in these positions in the history of the Board of Health. Ever thoughtful of others, and mindful of duty, he forgot what he owed to himself. Exposure and overwork finally caused nature to rebel, and cry out for rest. Yielding to the demand, he obtained a leave of absence, and made a trip to Canada. As he was returning, feeling somewhat improved by his vacation, he was suddenly taken with a chill, developed a cough, and was found, upon reaching home, to be suffering from an attack of pneumonia. This attack left him with a consolidation at the apex of the left lung. He obtained a further leave of absence, and sought the more genial climate of Georgia. Phthisis of a very rapid type quickly developed, and hæmorrhage succeeded hæmorrhage, until his strength was exhausted, and he was confined to his bed. The disease progressed steadily, baffling all attempts on the part of some of the best physicians in the South. A few weeks only before his death he returned to his home, in Staunton, Va. It seemed, as though weary of the battle for life, he had come home to die, under the tender and loving care of his mother. During his whole illness the desire to avoid giving trouble, or causing friends to worry about him, was paramount. His consideration for others prevented him from complaining, and he was constantly urging those about him, who loved to be of any service, to take more rest, and pay him less attention.

His generosity, which was at all times marked, although he was never able to spend money lavishly, was made especially prominent during his illness. Hearing that a friend and fellow-worker was in ill health in this city, and knowing his financial straits at the time, he wrote from Georgia, urging him to accept an amount which he had left on deposit in New York, and to use it in taking a trip for his health.

He became a member of this Society in November, 1883, and always took a deep interest in matters pertaining to its welfare. He contributed a paper on "Varicella," and by taking part in most of the discussions, and by his many social qualities, added largely to the enjoyment of the Society's meetings.

I have no more fitting tribute to pay to his memory than I find in the closing sentences of an obituary notice which

appeared in the *Valley Virginian*, a paper published in Staunton, where he was born, and where he died. *We* knew him as a man; *they* knew him from his birth, but their words find a responsive echo in our hearts. It is as follows:

"It was not alone for his professional attainments that he will be sadly missed. His place in the esteem of the world may be filled, but his place in the hearts of those who were bound to him by the ties of blood and friendship will remain vacant for all time. No man had truer friends, and none deserved them better. No parent had a son more dutiful; no brother was ever kinder or more beloved."

Surely thus

> "To live in hearts we leave behind,
> Is not to die."

Wm. K. Bowling, M. D., LL. D.

Some eleven or twelve pages of the September number, 1885, of the *Nashville Journal of Medicine and Surgery*, which he founded and long edited, are taken up with an account of the life and death of this great and good man. "The originator of the movement that resulted in the institution of the Medical Department of the University of Nashville, his lectures are still fresh in the memory of several thousand alumni. As a physician, his philanthropy was manifest in his every act. As an author, he created a name peculiarly his own. His was a life which every physician, especially of the South, will ever delight to honor." He was born in Westmoreland county, Va., June 5th, 1808. He graduated in 1836, from the Medical Department of Cincinnati College. In 1874, he was President of the American Medical Association. He held many of the highest places of professional trust in his adopted State, as in the United States. He retired to bed on the night of August 6th, 1885, at his mountain home, in the Cumberland table-land of Tennessee, and exhibited every sign of good spirits and health. He was found dead in his bed the next morning, lying upon his side, with one hand under his head, calmly, peacefully asleep.

Dr. C. H. Baker.

Of Smythe County, Va., died at his home August 12th, 1885, after a protracted illness due to sclerosis. He was one of the earliest members of the Medical Society of Virginia, but resigned in 1875 when he moved out of the State. He had not been physically able to attend to active practice for some years before his death.

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Original Communications.

ART. I.—**Valvular Lesions and Enlargement of the Heart.** By PROF. AUSTIN FLINT, M. D. Delivered in Bellevue Hospital, New York, N. Y., October 8th, 1885. Reported from Notes by SEYMOUR HOUGHTON, and Revised by the Author.

Gentlemen:—To-day I propose to consider, as supplementary to my recent didactic lectures, several cases illustrative of valvular lesions and enlargement of the heart.

CASE I.—The first case is this boy, aged 15 years. He gives the history of having had an attack of acute rheumatism two years ago, and at that time endocarditis probably occurred, inasmuch as this was his first attack of rheumatism.

The diagnosis of the existing lesions is to be based on physical signs, obtained by inspection, percussion, and auscultation.

On inspection, there is lividity of the tongue and prolabia, and also there is a dusky hue of the face. These appearances denote cyanosis, referable to two causes—*first*, insufficient oxygenation of blood, and *second*, over-accumulation of blood in the right cavities of the heart, causing stasis in the systemic capillaries. The latter is the more efficient of these two causes.

The præcordia is not apparently enlarged; but you notice

that the impulses of the heart are plainly visible in several of the intercostal spaces: It is essential, in determining the amount of cardiac enlargement, to find the lowest intercostal space in which the heart's impulse is to be felt, or in which the first sound has its maximum of intensity. The presence of an impulse in more than one intercostal space may lead to error without attention to this point, especially as the apex beat, under these circumstances, may be weaker than the impulses above it, owing to its blunted form. The apex beat is liable to be overlooked, and an impulse above, which may be stronger, considered as denoting the situation of the apex. This error would cause us to regard the cardiac enlargement as less than it really is. In the patient now before us, I find the apex beat in the seventh intercostal space. If the beat were not to be felt, the situation of the apex could be ascertained by finding that in this intercostal space the first sound of the heart has its maximum of intensity.

I will now employ percussion in order to obtain further evidence of the amount of enlargement. I find the left border of the heart situated about an inch without the left mammary line. The heart thus is considerably enlarged.

Now whether this enlargement involves predominant hypertrophy or dilatation, is the next important point of inquiry. By listening to the first sound over the apex, I find its intensity increased; it is prolonged, and the booming quality is abnormally marked. These abnormal modifications show that hypertrophy is at present predominant.

The enlargement of the heart with predominant hypertrophy in this case is the result of certain valvular lesions, involving either regurgitation or obstruction, or both. What these lesions are we learn by interrogating the heart with reference to adventitious sounds or murmurs.

Placing the stethoscope in the second intercostal space—that is, just above the base of the heart—I find a murmur coincident with the first or systolic sound of the heart. It is rough in quality, and I find it propagated into the carotids. This is, therefore, an aortic direct murmur. I do not find an aortic regurgitant murmur, and there is, therefore, no evidence of insufficiency of the aortic valves.

Comparing the aortic and pulmonary second sounds of the heart, I find the pulmonic second sound is much more intense than the aortic. This fact indicates, inasmuch as the aortic valves are good, hypertrophy of the right ventricle, from which it is to be inferred that some mitral lesion exists.

I will now direct attention to the mitral valves; and as I do so, listening over the apex, I find a murmur, pre-systolic in point of time, rough and vibratory in character, this peculiar quality being well expressed by the word "blubbering." The murmur is limited to a circumscribed area around the apex, and it, therefore, is a mitral direct or pre-systolic murmur.

There is another murmur heard in this situation, systolic and heavy, its maximum intensity being at the apex. As it is transmitted to the left of the præcordia, and may be heard at the lower angle of the scapula, it is a mitral systolic regurgitant murmur. As regards this murmur, it is to be discriminated from a mitral systolic murmur denoting endocarditis. Such a murmur does not necessarily involve regurgitation, and hence it is to be distinguished as a mitral systolic non regurgitant, or intra-ventricular murmur. Of this murmur I shall have occasion to speak in connection with cases of rheumatic endocarditis.

I now wish to call your attention to a murmur, the existence of which has not been recognized until recently; in fact, it is only within about a year that I have been led to observe it. It may be called a *mitral diastolic murmur*. The mechanism of its production is the same as that which occasions a mitral direct murmur; but from the fact of its occurring synchronously with the aortic regurgitant murmur, it is likely to be confounded with the latter, and hence overlooked. This mitral diastolic murmur occurs while the blood is propelled by the force of gravity and the *vis-a-tergo*, from the left auricle into the left ventricle, and takes place during the first part of the long pause of the heart—that is, prior to the auricular systole. Hence, it occurs during the diastole of the auricle, in the space of time between the ventricular systole and the auricular systole; in other words, just before the mitral pre-systolic murmur. In the case before us we have this murmur, together with the pre-systolic murmur. The whole of the long pause of the heart is occupied by this murmur.

Case II.—We will now consider another case of valvular lesion of the heart. The history is as follow: The patient is a boy, 19 years of age, and a laborer. Three years ago, he had an attack of acute articular rheumatism, which lasted six months. He then recovered health, and he noticed nothing further until a short time ago, when he began to complain of palpitation of the heart and of pain in the præcordia.

Proceeding in the same manner as in the previous case, I find that the apex beat is in the sixth intercostal space, and that the impulse of the heart is abnormally strong. This increase in force is not represented by the radial pulse, the latter being relatively weak. Listening for adventitious sounds, I find a mitral regurgitant murmur. At the aortic orifice, I find the evidence of lesions which give rise to an obstruction and a regurgitation. This evidence consists in the presence of an aortic direct and an aortic regurgitant murmur. The aortic direct murmur is distinguished from a pulmonic direct murmur, by being propagated into the carotids.

I should advise a patient, in a case like this, not to refrain altogether from exercise, but to take such exercise as occasions no discomfort, as I have endeavored to impress in my didactic lectures. It is a great error to enjoin abstinence from exercise in cases of organic affections of the heart.

Case III.—The last case which I shall bring before you is this patient, a laborer, 50 years of age. For four weeks previous to entering the Hospital, he complained of dyspnœa and palpitation. I find no enlargement of the heart, but, on auscultation, I find an aortic direct, as shown by its being transmitted into the carotids—and also a mitral regurgitant murmur.

When we find lesions existing, as in this case, without enlargement, the lesions may be considered of no present importance. These are innocuous, at least for the time being, and they may remain so indefinitely. In such a case, it is not always advisable to inform patients that there is anything abnormal, if the direct question be not asked. If the information cannot be well properly withheld, it is important to make such explanation as will be likely to prevent undue anxiety arising from the knowledge of the existence of an organic affection of the heart, bearing in mind the popular notion that disease of the heart always involves a fatal result and a liability to sudden death.

Papine.—Dr. T. G. Sheats, of Shady Grove, Ga., says: I have had the opportunity of trying Papine in a few cases. I consider it a very valuable anodyne, perfectly devoid of the secondary effects of opium or morphine.

ART. II.—**Causes of Death from Burns and Scalds.** By M. D. HOGE, JR., M. D., Candidate for Medicine, etc., Heidelberg, Germany.

The view which has been held heretofore, and in fact is now by a large majority of physicians, that a burn itself is an inflammatory process, has been attacked by Hüter and a few others, who maintain that the primary effect of a burn is purely mechanical and chemical, but which at the same time prepares the tissues for the introduction of inflammatory noxi.

A temperature just below the boiling point, coming in contact with the surface of the skin for a short time produces a burn of the *first degree.* This degree of heat even causes a partial paralysis of the cells of the muscular coats of the blood vessels; consequently a dilatation of the vessels, especially the small arteries; more blood flows to that part of the skin, and the color corresponding to this arterial fluxion is light red.

A burn of the second degree is when the heat is intenser than in the first degree; a stronger arterial fluxion causes the serum to flow in a greater or smaller quantity between the rete malpighi and the epidermis, raising the latter up in blisters.

When the heat is still more intense than in the last instance, a coagulation of albumen in the blood vessels and tissues takes place, which soon leads to *necrosis*, and is then called a burn of the *third degree.*

Some recognize a burn of the *fourth degree* when the parts have become charred, as, for example, when they come in contact with a glowing iron.

We see, as a rule, the reddening in a burn of the first degree pass away without a sign of inflammation; but, in one of the second degree, there are all four of the cardinal symptoms present (*color*, *rubor*, *tumor and dolor*) in a most characteristic manner. It would be difficult to find in the human body a hot bed more favorable in every respect for the pure culture and propagation of germs than just such a spot—a nutritive fluid, the serum rich in albumen, and the proper temperature—that of the body. As a proof that the inflam-

mation is secondary, if the wound be treated at once antiseptically before any germs have had time to enter, it heals more quickly and with less pain than by any other means. When the heat has come in contact with a large surface, the loss of epidermis may be very considerable—an important fact, as we shall presently see. When about one-third of the entire surface of the skin has been burned, the result in most cases invariably proves fatal.

As to the cases of death, the following may be mentioned:

1. *Shock*, produced by a great and sudden irritation of the sensory nerves (Sonneberg) so liberally distributed to the skin; and this in turn may be followed by paralysis of the heart.

2. The destruction of the red blood corpuscles. As was first proved experimentally by Max Schultze, at a temperature of 54° C., the corpuscles become shrivelled and partly disintegrated. The natural result is that a loss of such a large number of oxygen carriers seriously impairs the regenerative and nutritive processes at a time when they are most needed.

When the blood of animals (lamb, for example), is transfused into the human circulation, many interesting and important facts have been observed. For example, the human red blood corpuscles become shrivelled and disintegrated; further, they stick together, and, collecting in small lumps, stop up the capillaries. This stasis gives to the skin a bluish color. The vessels of the lungs are blockaded, causing difficult breathing, and from a rupture of the capillaries the sputum is tinged with red; the peristaltic action of the intestines is increased (Landois). In the urine, blood cylinders have been found (Mittler). Here we have the same effect brought about in two different ways—loss of the red blood corpuscles, in the first case, by heat, and, in the second, by transfusion, which in both may cause death.

3. As a third cause, may be cited an abnormal loss of heat from the body. First, as the effect of the paralytic dilatation of the blood vessels, the blood itself being an especially good conductor of heat; and second, the loss of the epidermis, which is a very poor conductor of heat—in fact poorer

than the panniculus adiposus (Klug). When warm-blooded animals are varnished over, they soon die (Foucoult); for example, a guinea pig, if one-eighth of his body is varnished; if the whole body, the temperature at once sinks 16° C. Stronger animals, such as a horse, may live several days, and if only one-half his body is covered, recover. Death is caused by a great and sudden loss of heat (radiation). As before mentioned, the epidermis is a very poor conductor, and in this capacity acts as a protector to the whole body, but it becomes a good conductor if a coat of varnish is laid on, so that its action for that particular part of the body is lost just as if it were not there.

As a proof that death is not caused by poisonous material absorbed by the skin from the varnish, blood of such animals has been carefully examined microscopically and chemically without a trace being found; further, some of this same blood has been injected into the circulation of other animals (of the same species), with no ill effects whatever.

Again, the checking of the so-called skin respiration by stopping up the pores can have but little influence, as in man the whole amount of carbonic acid given off in twenty-four hours is only 3.7 grammes, which is about $\frac{1}{220}$ of that given off by the lungs in the same time; and besides this suppression of the skin, respiration seems to be made up by increased lung activity. Now, in a burn of the second or third degree, the epidermis is either raised by formation of serum, and so easily brushed off by sticking to the bandage when it is removed, or it is at once destroyed, it is practically not present, and in consequence of its absence the radiation from the body goes on unhindered; in fact is promoted by an increased flow of blood to the parts as already pointed out. And from such a great loss of animal heat death may ensue.

From the causes of danger just enumerated, the therapy may readily be deduced. To combat the effect of the nervous shock, give wine and digitalis; as a means of preventing the propagation of germs, an antiseptic dressing should be constantly used; to keep the animal warmth as much as possible within the body, and prevent radiation, a warm cotton or lint dressing should be continuously worn.

ART. III.—**Prolapsed Ovarian Cyst Strangulated by Twisting of the Pedicle. Death—Remarks on Value of Exploratory Incision.** By HUGH M. TAYLOR, M. D., Member of the Virginia State Board of Medical Examiners, etc., Richmond, Va.

No subject in surgery is perhaps more pregnant with deep interest than the diagnosis of obscure abdominal and pelvic tumors. This field of operation, so rich in good results, is often circumscribed by the paucity of our diagnostic means. We can easily recognize an enlargement in the belly or pelvis, but in many cases it is by no means easy to ascertain the nature of the enlargement. It is much easier to operate for intestinal obstruction than it is to define clearly the cause and character of the obstruction before making an exploratory incision. It is much easier to remove an enlarged ovary or Fallopian tube than it is to recognize moderate enlargement, and it is much easier to remove a diseased, sensitive ovary than it is to say positively that it is the cause of all of the reflex phenomena present. The full scope of abdominal surgery cannot be attained until our diagnostic means are rendered more perfect. Many conditions now considered beyond the pale of rational and justifiable surgery will then be brought within its legitimate province. In the mean time, the great advance already made in this department justifies a more frequent resort to exploratory incisions in doubtful cases; and the subjoined report serves to show what good might have resulted had an exploratory incision, if only for diagnostic purposes, been made.

On the night of October 15th, Mrs. B., white, æt 28 years, was taken suddenly sick. She complained of excruciating pain, which seemed to be focused in her left lumbar region, and to extend from the locality of the kidney into the groin and down the corresponding thigh, and to a less extent to the bladder and rectum. The pain was perfectly unbearable; the patient was rolling and tumbling over the bed, and retching and vomiting at a great rate. She could assign no cause for the attack, except that she supposed she was pregnant, two months, and during the evening before she had attempted to lift some heavy piece of furniture.

Under the impression that the attack was one of kidney colic, with the passage of granular sand, we proceeded to

administer morphine hypodermically, and to follow it up by the free use of chloroform, hot applications, etc. This treatment in a few hours lessened her suffering very much; but at no time, in spite of as free an exhibition of chloroform and morphine as was safe, was she entirely free from pain; and as soon as the effects of these drugs began to wear off, the pain returned with increased violence. There had been no discharge whatever from the vagina, no intermediate pain, and nothing to indicate uterine contraction.

An examination per vaginam showed the os to be in its natural position, and it was soft and slightly enlarged. But just behind the neck was found a mass, which felt like an impacted rectum. The patient insisted, however, that she had not been at all constipated; on the contrary, for the past few days, she had suffered with diarrhœa.

An examination of the rectum, which was easily and thoroughly made, as the patient was under the influence of morphine and chloroform, showed that the mass was not in the rectum, but in all probability in Douglas' cul-de-sac. It was smooth, firm, ovoid in shape, about the size of, and felt like the fundus of the uterus, which had been acutely retroflexed and caught under the promontory of the sacrum. On top of the mass could be felt a little hard nodule, about as large as a marble, and this was supposed to be a little fibroid.

Efforts made at the time to correct the supposed displacement proving entirely fruitless, the patient was kept under the influence of morphine until the next day, and as the urgent symptoms showed no tendency whatever to abate, the same plan of treatment was continued for several days.

A sound passed into the uterus surprised every one by showing, from the direction it took, that the uterus was in its normal position. From the first, there had been no appreciable shock, no diminution nor increase of temperature, and nothing to indicate either hæmatocele nor ruptured abdominal pregnancy. Her pulse was quick, but not more than was probably produced by the stimulus of pain. As the trouble had existed for several days, and as the morphine, chloral, etc., had been pushed as far as possible, in our anxiety to give her relief, it was thought best to partially withdraw them, and by so doing eliminate all suspicion of morphine or chloral intoxication. At 9 A. M., the anodynes were withheld. About 7 P. M., she was reported worse; her suffering had become steadily more acute as the effects of the anodynes wore off. A mixture of equal parts

of the tincture of assafœtida and of valerian was ordered; of this a teaspoonful every two hours was to be given. It was obtained about 8 P. M., and as she was then without pain, a dose was immediately given. She raised herself up in bed to take it, but strangled in the act of swallowing, and did not get all of it down. Before the spell of coughing was over, she fell back on her pillow, and in a few minutes was dead.

The end came so quickly, and was so unexpected, that none of her friends present realized that she was dead for several minutes. Her mind was perfectly clear. When the medicine was brought into the room, she begged them to give it to her quickly, hoping it would ease her pain.

The friends readily consented to a *post mortem*. Upon opening the peritoneal cavity, the intestines, uterus and peritoneum were found healthy. Behind the uterus, in Douglas' cul de-sac, was found a small ovarian cyst, about as large as a Florida orange, close up to the uterus, within an inch of it. The pedicle of the cyst was found to be tightly twisted —so tight as to cut off venous return. The color of the pedicle next to the uterus was pale, pearl-like, while that beyond the twist was black and swollen. Between the folds of the broad ligament were found several large and numerous small blood clots, amounting in all, we suppose, to a pint, and evidently due to rupture of some of the over-distended veins. On top of the cyst was found the remains of the ovary. This was what was mistaken for a little fibroid.

When the uterus was opened, a small fœtus, enclosed in the unruptured membrane, was found. The sound introduced several days before had evidently passed between the membranes and the uterus, as a small clot showed its tract.

What the immediate cause of death was we are unable to say. Possibly it may have resulted from the entrance into the circulation of a portion of one of the clots. However that may be, the result of the *post mortem* goes to show that there was the strongest possibility of good resulting from early operative interference. An exploratory incision would have cleared up the obscurity of the diagnosis, and in all probability have saved the patient's life. The cyst was not bound down by adhesions, and to have lifted it out and thrown a ligature around the pedicle would have been the work of a few minutes.

It is with mortification that we record our mistakes, but

we atone to some extent when our experience becomes a warning to others, and impresses them with the importance of making a window to let in light where there is often so much darkness.

ART. IV.—**Acute Intestinal Obstruction—Case of Strangulation—Death—Autopsy—Remarks.** By G. T. VAUGHAN, M. D., Lowesville, Va.

On Wednesday evening, October 21st, 1885, I was called to see G. V., a little boy of 6 years, and obtained the following history from the parents: The child usually enjoyed good health, and on the preceding Wednesday he had eaten freely of chestnuts and small grapes, but retired at night apparently as well as usual. During the night he was suddenly taken sick with vomiting and pain in the bowels, and this continued at intervals on Thursday, Friday, and Saturday, there being no movement of the bowels during that time.

On Saturday, the vomited matter had a fæcal odor, and a physician was called in, who made a diagnosis of "worms," and prescribed calomel, aloes, and santonine, and enemata of castor oil in sweet milk. The enemata produced one or two small fæcal evacuations, but the emesis and pain in the bowels continued, and on Sunday the child fell into a state of collapse; the vomiting became less frequent, the pain was no longer complained of; and he was in this condition when I first saw him, on Wednesday evening, lying on his back, with cool skin, dilated pupils, pulse 150, small and weak, respiration 20, and abdomen very much swollen and tympanitic. There was no evidence of pain on pressure, though there had been previous to collapse; but the conjunctivæ were sensitive, and by calling the patient repeatedly, he could be aroused and induced to swallow. No tumor could be made out on palpation through the abdominal walls, and there had been no dysenteric discharge.

A diagnosis was made of obstruction of the bowels with strangulation—probably torsion—but an operation was considered useless in this stage. Stimulants were given with the vain hope of producing reaction, but the patient died early on the following Saturday morning.

The *autopsy*, twenty-four hours after death, revealed the

following: Cadaveric rigidity slightly marked, abdomen very much swollen and tympanitic, skin covering the abdomen of a greenish color, and odor offensive in the highest degree. On opening the abdomen, the stomach and small intestines were found enormously distended with gas, the latter being three times the size of the large intestine, which was empty and flaccid.

No fluid was found in the peritoneal cavity, but there was considerable localized peritonitis, the great omentum being adherent to the intestines and abdominal parietes on the right side, near the cæcum.

On tracing the small intestine from the stomach, it was found uniformly distended with gas, and also contained some liquid matter, until we came to the lower part of the ileum, about six inches from the cæcum, at which point the size suddenly diminished, forming a constriction. Within this contracted portion, which measured about an inch in length, was a hard substance, which was at first taken for a chestnut, or a large bean, but on making pretty firm pressure, it was found compressible, and was squeezed into a larger portion of the gut, whence it was removed by an incision. On examination, it was found to consist of grape-seeds and imperfectly digested chestnuts, and measured a little more than an inch in length, and about one third of an inch in diameter.

For six inches above and below this constriction, the convolutions of intestine were adherent one to another, and in a gangrenous condition, requiring great care to separate them to prevent tearing. The walls of the contracted portion were a little thicker, and not as much disorganized as were the walls of the intestine above and below. On introducing the little finger beyond the cæcum, and passing it through the ileo-cæcal opening, it passed loosely along the ileum until it encountered the contracted portion, which would only admit the tip of the finger without tearing the gut. No intussusception, torsion, constricting bands, nor internal hernia, could be discovered on careful examination.

The cause of this constriction is an interesting question for the pathologist to determine. As no constricting bands, etc., could be detected, the question arises as to whether this condition was due to congenital malformation, or was it the result of ulceration of the intestine, or of some malignant disease, or was it due to some other cause?

The patient had had no attack of fever, as far as could be

ascertained, and his previous good health would contra-indicate malignant disease.

I do not propose to write an exhaustive essay on this subject; but cases of acute intestinal obstruction are so frequently met with, and a correct diagnosis and prompt treatment are of such vital importance, that I hope to be pardoned for repeating a few facts that are well known to the profession, but which have been impressed upon me by a limited experience.

It is always impossible to differentiate between the several conditions which produce obstruction, such as invagination, tortion, internal hernia, impaction of substances, as gallstones, cherry-seeds, worms, etc.; neither is this a matter of vital importance, provided treatment be not too long delayed, as after the simple remedies have been tried and proved inefficient, laparotomy would be proper in any of the conditions mentioned, as affording the only chance for life; nor should the patient and physician be so influenced by dread of the operation as to delay it too long, for with the advantages of modern antisepticism, or perfect cleanliness, the danger has been reduced to a minimum.

In making a *diagnosis*—

(1) The history of the patient, his age, and mode of attack must be carefully considered. If the patient has been subject to attacks of obstinate constipation, or has been known to eat certain articles of food, important information may be gained. If the patient is under 10 years of age, we would be inclined to suspect invagination—half of the cases occurring in children under that age, according to Leichtenstein. The attack is usually sudden in invagination, torsion, and hernia, and gradual in impaction.

(2) Vomiting is an invariable symptom, and its violence and frequency are directly in proportion to the proximity of the obstruction to the stomach. If the vomit become stercoraceous and functional obstruction be excluded, there can be no trouble in making a diagnosis.

(3) Constipation is obstinate and complete, though there may be evacuations from the portion of bowel below the ob-

struction, the amount of the evacuations affording some evidence as to the location of the obstruction.

(4) Pain is at first of colicky character, but later on, if strangulation occur, it assumes a burning character, intense, unendurable, and little influenced by opiates.

These are the most important symptoms; but others should be carefully considered, such as peritonitis (localized), tympanitis, duration of the disease, and the presence or absence of any tumor or hernia should be determined by careful examination, by inspection, and palpation of the abdominal walls. Often, in cases of invagination, a "sausage-shaped" tumor can be felt through the abdominal walls; the invaginated portion may be felt by the finger in the rectum, or there may be a bloody or serous discharge from the rectum.

In making a diagnosis, care should be taken to *differentiate* from acute poisoning, cholera, peritonitis from perforation, simple colic, and functional obstruction. The latter is the only affection that might lead to error, and from it mechanical obstruction may be distinguished by the absence of localized peritonitis in the former, and the fact that it occurs in hysterical persons.

The diagnosis having been made (and the attendant can usually satisfy himself after two or three days of careful observation), the *treatment* next claims attention. An excellent rule to observe, according to Professor Flint, would be this: In any affection of the bowels, when in doubt about the diagnosis, *never* give a purgative; for if obstruction exist, it can only do harm, and if it does not exist, simple enemata of warm water or olive oil will answer the purpose, and are perfectly safe. Enemata of water or air, as long the patient can bear the tension, are useful, especially in invagination, and olive oil or ox gall, as recommended by Dr. Flint, to soften fæcal impactions. Balladonna or atropia should be used by mouth and rectum, in the hope of obtaining its relaxing effect on the muscular coat of the intestine, and morphia subcutaneously to mitigate pain and quiet peristalsis.

These remedies having failed to give relief, the question of laparotomy arises, and it should not be delayed too long,

as the patient's chances of recovery will be materially diminished; for spontaneous cures so seldom result, that their probability may be almost disregarded in the question of treatment.

As that distinguished surgeon, Dr. Hunter McGuire, so well expresses it, the physician who hesitates to operate, after having tried all other means, and failed to relieve his patient, "*is guilty of neglect of duty.*"

Clinical Reports.

Case of Pregnancy Causing Mental Trouble—Illustrating the Relation of Neuroses in Females to the Sexual System.
By ROBERT J. PRESTON, A. M., M. D., Member Virginia State Board of Medical Examiners, etc., Abingdon, Va.

As aptly said by Dr. Edward C. Mann, Superintendent of Sunnyside Hospital, Brooklyn, N. Y., in the *Virginia Medical Monthly*, November, 1884, "A great many of the neuroses to which women are subjected arise out of, or are in intimate reactive relation with the play of her sexual system, and the key to many of her nervous disorders will be found here." Though I must confess that I am reluctant to say or write anything that may have the least tendency to invite a renewed attack upon the much abused uterus, especially in these latter days when "every tyro in the profession, armed with a speculum and *lapis infernalis*," is a born gynæcologist, and almost every graduate sent out from our city schools is a fully-fledged surgeon, ready with scalpel and probe, and morbidly anxious for surgical renown and worldly applause; yet I feel constrained to report the following case, illustrative of this truth:

Mrs. E. M., aged 25, married December, 1881, of nervo-bilious temperament, came under my care the latter part of May, 1882. At my first visit I found her in an exceedingly distressing state of mind, causing great alarm to her family and friends, and closely bordering on insanity, having just arrived from a distant city, and having barely escaped being sent to a private asylum for the insane. There was no ap-

parent change in her physical condition, or in her general health, but very great mental aberration; at times melancholy and depressed, indifferent to every surrounding and every relation; at other times excited and rebellious to all treatment, with constant hallucinations, perverted emotions and ideation, frequently threatening violence to herself and others. An imperfect history of a miscarriage a few months previous was elicited, a very great irritability of temper, aversion to all society and friends, and almost complete intolerance of all marital approaches.

Upon examination at a subsequent visit, there was found very great nervous excitability and irritation of the external genitalia, and spasmodic action amounting almost to vaginismus. A digital examination was made with great difficulty; but the speculum could not be used at all. The digital examination, together with bimanual palpation, revealed a slight enlargement of the uterus, but no erosion or ulceration could be detected, or other abnormal condition. A diagnosis of probable pregnancy was given, and the bromides and iodides were prescribed and used freely for some time, in order to exercise some control over these nervous and mental disorders, and her parents were advised to await progress.

The case continued in much the same condition for two or three months, though a change to the country, pleasant companions, with exercise on horseback and otherwise in the open air, and every hygienic measure was used by her friends for reaction and diversion. During the fourth and fifth months, my diagnosis was fully verified, and soon after quickening, the nervous and mental symptoms began to improve, and my patient progressed favorably to her full term, when she was delivered of a hale, hearty boy January 18th, 1883. She had a speedy and very favorable getting up. Her mind was fully restored, and no nervous or mental disorder has since been evinced up to this writing.

This case was one of exceeding interest to me, not only in its medical, but also in its social threatened legal aspect. A reported trace of insanity in her ancestry (of which I could elicit no reliable history) coming to the husband's ears, together with this aversion to, and intolerance of, the conjugal relation, amounting at times to some violence and threatened self-destruction, and being afflicted at the same time with a *bad case of mother-in-law*, all together had secured for her a passport to an asylum; and but for the timely interven-

tion of her parents and friends, judicious advice and kindly care, ending in ultimate recovery, would doubtless have forever marred, if it had not destroyed, the happiness of her wedded life. But for this timely intervention, affectionate care and renewed home associations and surroundings, there would most probably have been precipitated a second abortion; and this superadded shock to the already tensely strung nervous system would have undoubtedly caused ultimate wreck and ruin in hopeless insanity. As it is, a full restoration to reason, to happiness and to home, the parents doubly bound together in that strongest tie, a common offspring, in the person of this bright, sunny boy, is the contrasted result.

Other cases bearing on this relation of nervous and mental diseases to the sexual system could be reported from my practice; but if this one, most marked, though imperfectly detailed, can have an additional effect in calling the attention of the profession to this subject, and thereby save some other poor suffering maiden or wife from that most deplorable of all human afflictions, loss of reason, my object will be fully attained.

Original Translations.

From the French and German. By WM. C. DABNEY, M. D., President of the Virginia State Board of Medical Examiners. Charlottesville, Va.

Causation of Locomotor Ataxia.

This subject is elaborately considered by M. Belugon in a paper published in *Le Progres Médical* for the 29th of August last. He refers, in the first place, to the statement made by M. Fournier some years ago, which excited so much interest at the time that in the vast majority of cases locomotor ataxia was due to syphilis. He next refers to the views which other writers entertain on the subject, and states these different views under three headings:

1. That which considers that the great majority of cases are due to syphilis; a view which is advocated by Fournier, Rumpt, Caizergues, Sindey, Drysdale, Erb, Bernhardt, etc.
2. That which attributes the chief cause to a hereditary

nervous predisposition. (Trousseau, Landouzy, Ballet, Charcot, etc.)

3. That which considers excesses of different kinds, and especially sexual excesses, the chief factor. (Trousseau, Lallemand, Rosenthal, Oppenheimer, Despres, etc.)

M. Belugon then states that he has had exceptionally good opportunities for studying the subject, because he practises at a health resort, where a great number of persons suffering from special troubles come for treatment. He reports in a tabular form thirty-two cases in which the etiology was carefully studied. Of these, ten only had been syphilitic, though he was unwilling to affirm that the locomotor ataxia in these ten cases was due to syphilis; and he calls attention to the fact that those persons who are most apt to have syphilis are just those, as a rule, who have been guilty of sexual excesses.

Furthermore, Fournier and his disciples say that the relationship between syphilis and locomotor ataxia is proved by the favorable influence exerted by specific treatment. All of the tabetic patients of M. Belugon who had had syphilis (ten in number), were subjected to anti-syphilitic treatment. Of these ten patients, six received no benefit whatever; the result in one case was unknown, and three were benefitted. In one of the three the improvement was very marked, but in this case there was reason to believe that the disease was due to syphilis of the nervous centers, and not to sclerosis of the posterior columns. Beside this, however, in four of the *possibly* syphilitic cases rheumatism may also have played an important part in the causation of this disease, and in three cases nervous heredity may have occupied a similar relationship. The conclusion which he reaches as to the influence of syphilis in the production of locomotor ataxia, is that "syphilis rarely causes locomotor ataxia directly, but it often places a person in conditions which are very favorable for the development of this disease. It may also by the lesions which it produces in the central nervous system, give rise to symptoms which are strikingly similar to those of locomotor ataxia, and it is in this latter class of cases that the mixed treatment seems to give the best results."

Hereditary transmission of a tendency to nervous diseases was noticed in thirteen of M. Belugon's cases, but in most, if not in all, of these cases other causes were at work which may have been instrumental in producing the ataxia. Thus, in four of the hereditary cases, rheumatism was observed; in five syphilis, and eleven of the thirteen cases had been guilty of venereal excesses; and, indeed, in only three of the

thirteen cases was the hereditary predisposition very marked. His conclusions on this branch of the subject are—

(1) Hereditary predisposition has an important place in the etiology of locomotor ataxia.

(2) Its importance is nearly as great as that of syphilis.

(3) Its action is especially manifested when the ancestors have been affected with some medullary trouble.

Rheumatism was the apparent cause of the disease in seventeen of the thirty-two cases. This relationship between the two diseases had frequently been marked before, especially by Rosenthal, of Vienna. (M. Belugon states that neither Fournier nor Landouzy and Ballet make any reference to it; but in a subsequent number of *Le Progrès Médical* (Sept. 19th, 1885), these gentlemen published a letter, in which they state that they have not been properly represented by M. Belugon, and they quote from the *Bulletin* of the Academie de Medicine to show that they considered rheumatism an occasional cause of tabes.)

Functional excesses were found to play an important part in the causation of the disease; indeed, excesses of some kind or other were to be found in all of the thirty-two patients.

Venereal excesses were those which occupied the most pominent position—they being acknowledged in twenty-one of the thirty-two cases. Onanism seemed to be most apt to induce posterior sclerosis; and several authors have remarked on an apparent connection between intercourse in the erect posture and tabes.

In five cases excess in the use of *tobacco* seemed to be responsible for the disease, though M. Belugon says he thinks this should always be considered an accessory cause.

In persons who are predisposed to medullary troubles, the anxiety and fatigue often incident to "the struggle for existence," will be sufficient to cause the development of tabes.

The conclusions at which M. Belugon arrives are as follows:

1. There is no *one* cause or circumstance which is always necessary for the production of posterior spinal sclerosis.

2. The etiological elements which seem to be of most importance are syphilis, hereditary tendency to nervous diseases, rheumatism, and functional abuses.

3. In almost all cases, no matter what other factors may be influential in the production of the disease, functional excesses and a nervous disposition are accessory causes, and have more or less influence in inducing its development.

4. As a rule, says M. Belugon, a person having locomotor ataxia presents the following history: He has a highly nervous temperament, either inherited or acquired through functional abuses; then he contracts syphilis, or takes cold, and has rheumatism, which completes the etiological history of the disease.

Menthol and Cocaine.

In *Le Progrès Médical* for September 12th, 1885, there appeared quite a lengthy paper on menthol, written by Dr. J. Baratoux. He commenced by referring to the topical use of menthol in neuralgic affections, which has become so common in America that the "laity" resort to it without consulting a physician.

He then refers to a recent paper of Dr. Rosenberg, of Berlin, in which it is declared that menthol will produce anæsthesia very similar to that caused by cocaine, and nearly as marked. Dr. Rosenberg used a solution of menthol in ether, in the proportion of 20 per cent. This was applied to the mucous membrane of the turbinated bones, where it was tumefied and painful. The effect was not so certain as that produced by cocaine (and which has very recently been described by Dr. Da Costa, of Philadelphia), but usually the sensibility "disappeared," and the swelling diminished after its use.

In seventy cases, he had never observed either inflammation or cauterization of the mucous membrane. In thirty-one of these cases, it was applied to the mucous membrane of the nose for swelling, and consequent obstruction of the nasal passages.

The effect produced by menthol usually lasts about a quarter of an hour, but it may last half an hour, or even an hour and a half; and if the applications are repeated, the analgesic effects are prolonged.

Rosenberg has usually employed the 20 per cent. ethereal solution, as mentioned previously, but he has also used solutions of from 20 per cent. to 50 per cent. in alcohol or oil. With the 20 per cent. ethereal solution, he claims to have produced almost complete anæsthesia of the throat, which may be utilized for laryngoscopic examinations, and for painful applications to the mouth or throat.

In order to lessen the pungent taste, and prevent burning, it is well to take a number of deep inspirations with the mouth open.

Dr. Baratoux's observations are rather different from those of Rosenberg. He advises, in the first place, that the men-

thol be dissolved in "petro-vaseline" (vaseline? W. C. D.), which is much less irritating than either alcohol or ether. He states that after two applications of a 33 per cent. solution to the gums, the sensibility was not sufficiently lessened to enable him to use the galvano-cautery, and that cocaine was then used with entire satisfaction; nor have his results been satisfactory in cases of acute tonsillitis.

In applications to the nasal mucous membrane, it gives much more satisfactory results, especially if the patient respires rapidly through the nose for a few minutes. There is some smarting, but this soon gives place to a feeling of freshness. The swelling of the mucous membrane was very sensibly reduced after the application.

When applied to the conjunctiva, it first causes quite severe smarting and pain, and there is considerable injection of the blood-vessels, but this soon disappears, and a "very pronounced" anæsthesia is observed.

In removing polypi from the nose, Dr. Baratoux says menthol has given him some satisfaction, but when used in the ear to remove aural polypi, it has produced intense pain.

In one case, when a 50 per cent. solution of menthol in petro-vaseline [cosmoline or vaseline] was applied to the soft patch, in a case of extensive syphilitic ulceration, the galvano-cautery was subsequently used without any pain.

In conclusion, Dr. Baratoux says that while menthol is sometimes useful, it cannot compare with cocaine, either as an anæsthetic or as a means of lessening congestion.

Case of Traumatic Tetanus Cured by Stretching Both Sciatic Nerves. By Dr. Reichert (Aerztlichen Intelligenzblatt, 1885.–5).

This case, reported by Dr. Reichert, presents some interesting features. A soldier, 21 years old, was bitten in the back by his horse, on the 1st of August. On the following day he complained of slight headache and pain in the neck. This feeling of general discomfort continued until the 11th. On that day he complained of a glimmering before his eyes, and almost immediately afterwards was taken with some jerking of the muscles on the whole left side of the body, and fell unconscious to the ground. He was admitted to the hospital while in this unconscious state. His pupils were moderately dilated, but did not respond to light in the slightest degree. There was almost constant grinding of the teeth. From time to time there were tonic or clonic con-

vulsions of the flexor muscles of both upper extremities, and slight opisthotonos. On the following day consciousness had returned, and the wound below the spine of the left scapula was found to be covered with a cheesy pus. Until the 22d of August, the attacks increased in violence and frequency, but each single attack was less severe than the first one had been. On that day (August 22d), both sciatic nerves were cut down upon and stretched. Immediately after the operation, the trismus and asphyxia disappeared, and there was no attack afterwards.

The case reported lacks some of the characteristic symptoms of tetanus—a circumstance which is remarked by Dr. Reichert; the prodromic stage (eleven days) was unusual, and the loss of consciousness, which occurred in all the attacks which this patient had, is very unusual—if not unknown—in *true* tetanus. Dr. Reichert says, with truth, that the attacks were similar to those of eclampsia. Notwithstanding these deviations from the ordinary course, however, he thought it proper to diagnose the case as one of tetanus. The complete relief, and, indeed, cure, which resulted in this case, the author rightly considers, would justify a further trial of this method of treatment in similar cases.

Proceedings of Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Meeting November 12th, 1885.—The President, J. C. Wilson, M. D., in the chair. W. E. Hughes, M. D., Recorder of the Society.

Mastoid Disease.

Dr. Frissell presented specimens from a case of mastoid disease. Male, æt. 25 years. Never had scarlet fever since vaccination at the age of 5 years; has had occasional attacks of suppuration of the middle ear; general health was good; was first seen by Dr. F. July 14th; for several weeks he had had earache, with one slight chill. When seen, hearing was very poor, membrana tympani opaque, swelling and redness over left mastoid process and temperature elevated. His general condition grew worse, and an incision was made over the mastoid process, but it failed to find pus. On extending this incision a few days afterwards, pus flowed freely, and he was much relieved. He afterwards grew worse, fell

into a typhoid condition, and died July 24th. Before death, blood oozed freely from the cutaneous surface. At the autopsy the mastoid cells were found filled with pus; in the inner half of the process was a large irregular cavity filled with a pultaceous mass of necrosed bone; this communicated with the middle ear. The walls of the lateral sinus were thickened, easily detached from the bone, and the seat of a purulent inflammation. The sinus contained no thrombus. The meninges over this spot were discolored, though not inflamed; but there was a patch of inflammation over the anterior edge of the lobe of the cerebellum. Brain substance was normal. Remaining organs were not remarkable, except the right lung, which contained in its apex two small abscesses. From the condition of the sinus, the Reporter thought there had been an actual admission of pus with the blood.

Anomalous Lung—Cystic Kidneys—Carcinoma Mammæ.

Dr. Packard presented an anomalous lung. It was taken from the body of a negro who died of Bright's disease. From the inferior surface of the lower lobe of the right lung springs a tongue-shaped process of pigmented, crepitant lung tissue, two and one-half inches long and two inches wide at its base, resting upon the diaphragm, its upper surface being in apposition with the under surface of the lower lobe. Dr. Packard has recently seen in the body of another negro a similar anomaly, except that the process was smaller and situated more anteriorly.

Dr. Musser presented a *cystic kidney*. It was the right kidney, and was taken from the body of a man, æt. 72 years, who died of apoplexy. The kidney was cirrhotic and contained two cysts, the larger occupying the upper one-fourth of the organ. Its walls were firm, and contained clear fluid, in which floated cheesy masses, which the Reporter thought were degenerated pus. When first seen the patient was passing small quantities of bloody, highly albuminous urine, and complained of pain in the right renal region. These symptoms were apparently due to an acute process grafted upon the chronic lesion. The blood and most of the albumen disappeared, but the pain persisted; was this pain due to the cyst?

Also *carcinoma mammæ* removed from the body of a woman, æt. 75 years. The breast had been injured eight years ago, and three years afterward the tumor noticed. There was never any pain in the tumor. The lymphatic glands of the axilla were involved. In addition, there was a large lipoma of

the back of the arm. She had frequent attacks of severe pain in the tibiæ and left parietal bone, apparently due to periostitis, and not to any secondary growth. There was no syphilitic history.

Lactescent Blood.

Also specimens from a case of diabetes mellitus. Female, æt, 43 years. Had a vesico-vaginal fistula fourteen years. Diabetes had existed, without apparent cause, two months. Patient was exceedingly fat, and had lost no weight. She died of coma. Temperature in the abdominal cavity three hours after death was 107.8° F. Liver large and fatty; gall-bladder contained thirty stones; kidneys fatty; pancreas normal. Blood had a most marked lactescent appearance, and after standing twelve hours, globules of fat collected on its surface. Lacteals in the mesentery engorged with chyle. Microscopic examination of lungs showed no fat emboli. In the urinary bladder was a large phosphatic calculus. Dr. Osler thought the peculiar condition of the blood was what we should find normally in a person dying during digestion, and called attention to the fact that very frequently in diabetes there is the engorgement of the lacteals.

Fœtus Papyraceus.

The mother was delivered in the morning of a mature, living child, and in the evening of this fœtus. It is apparently of the fifth month of pregnancy, and with the exception of shriveling and pealing of the skin, is quite normal. The cord is thin and soft, its length unknown. The placenta is thin, flat, compact and whitish yellow, apparently having undergone complete fatty degeneration.

Solid Tumor of Wrist.

Dr. J. B. Roberts presented a small tumor, the size of a hickory-nut, which he had removed from the back of the wrist of a young man. It had the clinical appearance of an ordinary ganglion, but attempted evacuation showed it to be solid. It was then enucleated and found to have been developed within the theca of the tendon going to the middle finger, and probably between its fibres. The great variety of solid tumors in this locality was mentioned.

Dr. Osler asked if the patient had a rheumatic history, although this specimen was rather large for a sub-cutaneous nodule occurring in rheumatism.

Dr. Roberts knew nothing of its history.

Dr. Nancrede presented *fluid from an encysted hydrocele.*

The fluid contained large numbers of dead spermatozoids.

Primary Carcinoma of Liver.

Dr. Hughes presented a primary carcinoma of the liver. Female, æt. 58 years. A daughter died of cancer of the uterus. She had been in good health till eighteen months ago, when flesh and strength began to fail. With this there were occasional attacks, lasting about a week, of headache and sick stomach, followed by diarrhœa. There was pretty constant lancinating pain in the hepatic region. Five months ago she had an attack of jaundice (her only attack), lasting two weeks, and at this time a tumor was detected in the liver. At the autopsy, the liver was found much enlarged, and scattered through its substance were firm cancerous nodules, varying in size from an orange to a pin head. In addition to these there were several cysts, one in the left lobe, two inches in diameter, filled with clear fluid. The liver substance between the cancerous nodules was normal. The gall-bladder was full of healthy bile and the ducts patulous. There was no enlarged gland in the fissure of the liver, but the retro-peritoneal and mediastinal glands were increased somewhat in size, and the seats of secondary deposits. With these exceptions there was no growth outside the liver. The intestines were crowded into the left side of the abdomen by the enlarged liver. The stomach was very small, only one inch in diameter at its fundus. There was an intussusception three inches in length at ileo-cœcal valve, which on being reduced, which was effected with some difficulty, showed opposed surfaces of peritoneum covered with lymph.

Lesions of Chronic Alcoholism.

Dr. Formad presented specimens and read a paper on an analysis of 250 autopsies on drunkards, illustrating the most prominent anatomical lesions of alcoholism. He considered the most conspicuous lesions to be cyanotic induration of the kidneys, fatty infiltration of the liver, and mammillated stomach. His cases had been those in which there had been a history of a long continued series of debauches, the subjects often dying in one of these debauches, and did not include moderate drinkers—those who perished after imbibition of an enormous quantity of alcohol without any previous chronic excesses. He thought that the exposure, irregularity of diet, etc., incident to a state of drunkennesss, had much, probably more than the alcohol itself, to do with the production of the lesions; but it was not at all possible to separate one from

the other. He gave a long list of lesions considered by various authors to be results of chronic alcoholism, among which the cirrhotic liver with contraction held a prominent place. He had himself at one time considered cirrhosis a very frequent, if not almost necessary concomitant of long-continued excessive use of alcohol; and had even testified in court that a certain person was not likely to have been a hard drinker, because at the autopsy no cirrhosis of the liver was found. He had thought, too, that the connection between the two was so close that it was impossible to have a case of cirrhosis without a previous history of alcoholism, as is held by various authors. Therefore it was surprisng to him to meet, in his 250 autopsies, with only six cases of cirrhosis of the liver with contraction. In 220 cases the liver was considerably, or even very much enlarged—the enlargement, in most cases, proving to be due to a fatty degeneration. Cyanotic induration of the kidney and chronic gastritis, with mammillation of the stomach, were found in nearly every case. This cyanotic induration is peculiar, and differs from the cyanotic induration due to heart disease. At a future meeting he will give a detailed account of the above lesions, and a more extensive analysis of the cases.

Dr. Tyson could not speak from a systematic observation of a large number of autopsies in the cases of confirmed drinkers, but he remembered distinctly being surprised in several cases by the absence of cirrhosis where he confidently expected to find it.

Dr. Wilson said that Anstie, in the article on alcoholism, in Reynolds' *System of Medicine*, had called attention to the comparative infrequency of contracted liver in confirmed drinkers. This observer, in an extensive out-patient practice in London, had seen large numbers of cases of alcoholism, but very few among them presented the physical signs of cirrhotic (contracted) liver. The experience of the Staff at Blockley Hospital sustains this view. There, many of the patients are soaked with alcohol; but even among those whose death is directly or indirectly due to alcoholic excess, fatty liver is much more common than contracted liver.

Dr. Osler thought the experience of pathologists and morbid anatomists with histories of patients is not of the most satisfactory character—he often having had cases to dissect where he knew very little of the history. Before saying these cases were chronic alcoholics, Dr. Formad should present more specific statements about them. His own experience with livers, in a large number of autopsies on cases of chronic alcoholism,

had led him to divide them into four class:—(1) Those in which the condition of the liver is pretty satisfactory; some of these cases may take alcohol for many years, and yet the liver pass muster. (2) Fatty cirrhotic liver; the cirrhosis may not, perhaps, be distinct to the naked eye, but plainly shown by the microscope; this is the largest class. (3) Hobnail livers; these, he would say, were much more common than in Dr. Formad's series. (4) Hypertrophic cirrhotic livers. The difference between his observations and those of Dr. Formad might possibly be accounted for by a difference in the form of alcoholic beverage taken. He had not observed the special form of kidney described by Dr. Formad. In reply to a question, he said, in order of frequency he would place them: fatty cirrhotic, hobnail, hypertrophic cirrhotic, apparently normal.

Dr. S. Solis-Cohen said that there were certain theoretical considerations which suggested themselves in this connection. The text-books teach that the lesions of alcohol are of two kinds—sclerosis and steatosis. It is known that in some organs the fibrous change precedes the fatty one. The latter is the higher grade of degeneration. The subjects of Dr. Formad's autopsies were confirmed whiskey soakers, in whom one would expect to find more intensity of degeneration than in those whose use of alcohol, though persistent and excessive, was not so outrageous. Another point which had not been alluded to was the fact that some lesions might result from a local action of the poison upon the tissues, while others might be due to its systemic action. No study of the subject could be complete in which these poisons were overlooked.

Dr. Randall suggested that the point touched upon by Dr. Osler—the character of alcoholic beverage—might be very important. In Vienna, among beer-drinkers, he had found the fatty liver much more common than the cirrhotic, while in England where much gin is drunk, and he should suppose in Scandinavian countries, where they drink altogether strong spirits, the cirrhotic liver is doubtless comparatively frequent.

Dr. Musser had recently to go over the records of the Pathological Society, especially in liver diseases, and had found the total experience of different observers the same as Dr. Formad's; and also in those cases, cirrhosis was caused not so much by heavy drinking as by persistent drinking of spirits on an empty stomach.

Dr. Formad presented the *sac of an extra-uterine pregnancy.*

The woman from whom this was removed had not suspected that she was pregnant. She was in perfect health till twelve hours before death, when she was suddenly seized with excruciating pain in the left groin, rapidly followed by collapse. On opening the abdomen, it was found to contain at least a gallon of partly clotted blood. About the middle of the left Fallopian tube was the sac, with a rent in its posterior wall. This sac was one inch in diameter, and contained clotted blood and placental tissue. The uterus was twice its normal size. The fœtus was not found.

Also an *aneurism of the ascending aorta, rupturing into the pericardium.* The patient was a laboring man, and had considered himself in perfect health. He died very suddenly. The aneurism, half an inch in diameter, was situated just above the posterior aortic leaflet, and had broken through the wall of the aorta at the point where it touches the descending cava. The cavity of the pericardium was fully distended with clotted blood.

Analyses, Selections, etc.

Hydronaphthol—the New Antiseptic.

In the course of a lecture by Dr. R. J. Levis, of Philadelphia, given in the *Medical and Surgical Reporter*, November 14th, 1885, he says:—

Hydronaphthol, the new antiseptic recently introduced into the surgical world by Dr. George R. Fowler, of Brooklyn, bids fair to supersede most of the antiseptics now in common use, as its claims are undoubtedly stronger than those of any one agent at our command.

It is antiseptic in the truest sense of the word—*it prevents putrefaction.* Its action is chiefly inhibitory, and excepting corrosive sublimate, it is most powerful in this particular.

To review what Dr. Fowler has brought forward in its favor—

1. It is non-irritant, non-poisonous, and non-corrosive.

2. Though only soluble in water to the extent of one part of hydronaphthol to one thousand parts of water, in this proportion it is antiseptic.

3. It is inodorous; hence it cannot disguise the odor of putrefaction.

It is not decomposed nor rendered inert by the products of putrefactive decomposition—such as sulphuretted hydro-

gen, ammonia, etc. It is not volatile at the ordinary temperature of the atmosphere, hence is more stable than carbolic acid, than which it is fifteen times more efficient. It is positively harmless alike to tissues and fabrics.

Being non-corrosive, it will not injure the polished surfaces and keen edges of cutting instruments, and is in this respect more desirable than corrosive sublimate.

A saturated solution, as above stated, is about the strength of 1 to 1000, and in this proportion, perfectly preserves for an indefinite time animal tissues and fluids; yet, upon living tissues this solution has no other perceptible effect than the formation of a slight albuminous film—this being rather an advantage than otherwise, as it secures against infective germs floating in the atmosphere.

It is easily powdered, and in this state triturated with carbonate of magnesia or oxide of zinc, etc., etc., in the proportion of two parts of hydronaphthol to one hundred parts of one of the above named substances (oxide and zinc probably the best) may be dusted over the wounds, along the lines of incisions, and over the mouths of drainage-tubes. In this latter application, it presents an advantage over iodoform, now so commonly used, in that it does not dry up the serum escaping from the wound cavity, and thus block up the exit extremity of the tube.

Its ten per cent. (alcoholic) solution perfectly sterilizes silk, and hardens, sterilizes, and preserves cat-gut.

Though as an antiseptic it proved active in arresting the development of bacteria in the proportion of 1–1000 parts, it did not stand the test of a germicide in a solution five times above saturation.

Here, as elsewhere, holds good the old proverb:—"An ounce of prevention is worth pounds of cure." If we prevent the formation of sepsis in a given case, we will obviate the necessity for a germicide or disinfectant.

This week, for the first time, we relied upon hydronaphthol as the sole antiseptic used in a case of compound fracture of the leg. When the patient was admitted to the hospital, he had a temperature of 100° F.; now, at the end of the fourth day, it is normal, and the wound doing well in every respect.

As a true germicide, for use where septic conditions already exist, the bichloride of mercury is the most efficient agent; for simple antisepsis, or inhibitory or preventive action, hydronaphthol appears to be preferable for general use, and may well displace carbolic acid.

The Recent Antipyretics; Kairin, Antipyrin and Thallin.

J. E. Blomfield, M. R. C. S., Eng., in the October number, 1885, of *The Practitioner*, gives a *resumé* of recent Continental contributions regarding each of these drugs.

Kairin, was discovered in 1882 by Otto Fischer, of Munich, and was prepared by him from quinoline. Quinoline is formed as a colorless liquid when quinine, cinchonine and some other alkaloids are treated with caustic potash and subjected to distillation, and from it many derivatives have been prepared, one of which is tetra-hydro-oxy-methyl-quinoline, or more simply *kairin*. Its therapeutic action was first investigated by Prof. Filehne, of Erlangen, who concluded that it was a valuable antipyretic.

It is a yellowish white powder, of faint smell and bitter taste, soluble in water and alcohol, slightly in ether. Its watery solutions tend to change color and become of a claret tint. With reagents, such as nitric acid, solution of iodide of potassium, or chlorine water, it gives more or less characteristic precipitates, or coloration; but the most generally useful test is strong nitric acid, which produces an orange red in solutions as weak as one per ten thousand; this reagent readily shows it in the urine an hour after its administration, or if given hypodermically in less time. With perchloride of iron it gives a color which is first violet and then red.

Its physiological properties have been studied by various observers in France, by MM. Hallopeau and Girat, in 1883, and by MM. Loze and Conscience in December, 1884.

Dr. Conscience gives the following as the effect of kairin on dogs and guinea pigs:—Intense cyanosis of lips and tongue, diminution of respiratory movements, abundant salivation, rapid fall of temperature, fits of shivering and diminution of pulse-rate in proportion to the fall of temperature; convulsions and epileptic movements, and finally a comatose condition; diminution, and finally total abolition of cutaneous sensibility; paralysis and contraction of the limbs; diminution in the quantity of urea excreted. After death, arterial blood is black; the heart is arrested in a diastole, with the left ventricle full of blood. The lungs, intestines, and bladder were congested, and the lines of the arteries marked with peculiar distinctness by the dark color of the blood. This peculiar action on the blood has been the subject of experiment by MM. Loze, and Brouardel. They found that the respiratory capacity of the blood is very considerably reduced, in some cases amounting to nearly one-half. The method of experimenting consisted in determin-

ing the amount of gases yielded by 100 volumes of blood before and after the administration of kairin, and further analysis of the gas showed that the amount of nitrogen was nearly constant, indicating that the action was on the oxygen and carbonic acid. Another interesting fact brought to light was that the action of this body on the blood produced methæmoglobin—one of the products of the deoxidation of oxyhæmoglobin. According to a Russian observer, the blood corpuscles change shape which appears to be the same as that described by Dr. Roberts as produced by solutions of boracic acid, in which the central part of the corpuscle projects as a rounded prominence from one side, giving the corpuscle the appearance of a cupola. In accordance with the diminnished respiratory movements, and with the altered condition of the blood, the respiratory changes were found by Dr. Conscience to be considerably modified and in proportions to the fall of temperature.

Fall of temperature is always produced by the drug in healthy animals, but not to any very large extent unless the doses are considerable. If a poisonous dose, a fall of 9° C. may be recorded before death; but in animals rendered febrile by the injection of septic matter, a fall of 1°.5 or 2° is quickly brought about with doses that produce no other marked effect. In healthy animals, the amount of urea excreted is considerably lessened.

Therapeutically, kairin has been given on two different plans. The first, that of Filehne, is to give the drug in small doses, varying from ten to fifty cubic centigrams, according to the general state of the patient, every two hours making use of the thermometer before each dosage, and being guided by that instrument in its administration; the second is that of Riess, who gave large doses at a time, varying from 1.50 grm. to 3 grms. when a lowering of 2° or 3° C. took place which lasted about five or six hours; but in one case of typhoid he reduced the temperature to 35°.8 and the patient into a state of collapse, which however passed off.

The drug has been given by the stomach and hypodermically. The latter method is praised by Queirolo of Bologna, who dissolves from ten to fifty cubic centigrams in a wineglassful of water, of which solution he has used ten to thirty cubic centimetres as an injection, and he has seen no ill results arise. The ill results recorded are abundant perspirations, which quickly follow its administration but do not last any length of time. Occasionally vomiting has been produced, and fits of shivering; on the re-ascent of the tem-

perature a peculiar nasal pruritus and dryness of throat, and sometimes frontal headache.

Antipyrin, known chemically as dimethyl-oxyquinicine, was discovered by Dr. Knorr, of Erlangen, and first subjected to experiment by Prosessor Filehne, of Munich. It is a crystalline powder, very pale salmon-pink color, slightly bitter flavor, but is more easily taken by patients than kairin; soluble in water, alcohol, chloroform, and ether. Like kairin, it gives various precipitates with different reagents. With nitrous acid, and with perchloride of iron, a color resembling the pigment "dragons'-blood," or when the solution of perchloride is strong, a port-wine color.

Its physiological properties have been investigated by M. Bouchard, MM. Henocque, Arduin, and Huchard. A toxic dose administered to a mammal produces great fall of temperature, as much as 6.2° C. The respiratory movements are at first quickened and then much slowed; the heart-beats decrease in number with the fall of the temperature, and after death the heart is found arrested in diastole. Tonic and clonic convulsions are produced, and a peculiar rigidity of the muscles, which allows a limb to retain any position in which it is placed, reminding the observer of the cataleptic condition. Bouchard has shown that this action was due to the nervous system, and not to an action on the muscles directly; for if a limb was cut off from the central nervous influence by section of its nerve, it manifested none of this stiffness, which was found, however, in all other parts of the body. No action similar to that of kairin on the blood-corpuscles and hæmoglobin has been recorded, though experiments have been made with this object but it produces a diminution in the excretion of urea. Dr. Queirolo observed that it dilates the cutaneous blood-vessels before the diminution of the temperature commences, a fact which might tempt the idea that this profuse sweating causes the fall; but this is no constant or necessary effect, and is not found when the doses are small. I have tried the action of a five per cent. solution on the blood-corpuscles, but failed to find anything analogous to that described above of kairin.

On a healthy man, in non-toxic doses, antipyrin does not lower the temperature, and it has been asserted to have the opposite effect. In the experiments of MM. Arduin and Henocque, a peculiar hæmostatic action was found, but the data are not sufficient to pronounce with any confidence on this property. They found that blood flowed with difficulty from the vessels of an animal under the influence of antipy-

rin, and when comparative experiments were instituted with ergot and perchloride of iron as to the time in which each would arrest an artificial hæmorrhage, the balance was in favor of antipyrin.

Therapeutically, it has been administered by the stomach, rectum, and skin. The first is probably the best way, unless particular reason exists against its use. When given hypodermically, a good deal of pain is produced; and when given by the rectum its usual effect is manifested, which differs in no way from that produced by injection into the stomach. It has been employed in large, and in smaller doses given frequently; the latter is the better mode of administration, and less liable to produce the few disagreeable symptoms. Of course we must bear in mind what effect we wish. If an acute febrile disease, whose temperature curve is rapidly approaching the hyperpyretic region, administer one large dose; but if, a chronic febrile disease, such as typhoid or phthisis, administer it only in small doses sufficient to produce a slight fall in the temperature, and when we know the fever is on the ascent. The ordinary dose is a half to two grammes.

As regards its disagreeable consequences, there have been recorded: a roseolous rash which soon disappears, sometimes vomiting after large doses, and profuse sweating, which may, produce a state of great exhaustion; so that the drug requires to be given with consideration and judgment, but it is freer that many antipyretics from the production of nervous troubles, such as shiverings, headaches, and singing in ears, deafness, etc. I have seen none of these bad effects except the sweating, which is profuse, but seems to have no bad effect on the patient. The drug can be found in the sweat within two hours after its administration.

The diseases in which the drug has been given are practically the febrile diseases. In typhoid fever, it has been very largely employed, and the result arrived at may be stated to be a constant fall of temperature of a Centigrade degree or more, varying with the dose. It exercises no effect on the course of the malady, but is useful in combating the symptoms of fever. It may be given in the afternoon or evening as the temperature curve is commencing its ascent, with confidence that a fall of temperature will be produced, which fall, however, is not of long duration, lasting about six hours, unless more of the antipyrin be administered. Dr. Mackew, noticed vomiting several times during its administration (but this was not necessarily due to the drug), and a rash as

above described with the first doses (which were large thirty grains); but a tolerance appeared to be established, for subsequently the rash was not produced. He further found that atropin or oxide of zinc would control the sweating if given before the antipyrin. The conclusion arrived at was, that it was of undoubted value in the treatment of this disease.

In tuberculosis and pulmonary phthisis, observers speak very highly of its action when given in small doses, such as three or four grains for several days consecutively; for not only does it lower the temperature, but "the patient experiences a sensation of *bien être* quite remarkable, the dyspnœa is calmed, the sleeplessness disappears," so much so, that M. Huchard speaks of it as the specific of the tuberculous fever. In these small doses, it does not produce the sweating which would be in phthisis a very undesirable result. It is possible, that its hæmostatic action, before described, may be of use in this disease.

In acute rheumatism, the results obtained do not agree, possibly from the employment of different doses. Some authors praise it as having an action similar to, but quicker than, the salicylates, while others deny that it is of any use.

Thallin, whose chemical name is tetra-hydro-para-methyl-oxyquinolin, derives its more useful appellation from the green color which its salts give with perchloride of iron. It was first used as an antipyretic by Rudolf von Jaksch, of Vienna, but it has not long been before the medical and scientific public; but it has been used by M. Huchard and Prof. Jaccoud in various febrile diseases. Prof. Jaccoud, used the sulphate and the tartrate forty-three times with eleven patients suffering from typhoid, tuberculosis, pneumonia and erysipelas. The dose varied from 100 ccm., to 10 ccm, but where he gave 100 cubic centigrams in divided doses of 25 ccm. every half hour he produced a fall of temperature to 32·4 and a state of collapse which required energetic measures to combat.

As to its antipyretic effect in typhoid with the doses and their result, we will take the following:

9th day of disease	75 ccm.	produced	fall of	3°.6 C.
8th following days	50 ccm.	„	„	2°.7 „
18th and 19th days	45 ccm.	„	„	2°.5 „
20th and 21st days	30 ccm.	„	„	.8 „

From this it can be seen that its effect is well marked and rapidiy produced, for as a rule the temperature began to fall in about two hours, and the abatement lasted about five

hours. Thallin produces less perspiration than kairin and antipyrin, with total freedom from sickness and headache.

He concludes that in thallin we possess an antipyretic which in this quality surpasses all the others. None act in such small doses with so little inconvenience. Thus in doses of five to ten ccm. every hour, we should maintain in all probability a state of apyrexia, but the effect on the course of the disease is nil. The conclusions of M. Huchard are similar; he noticed the general freedom of the drug from undesirable effects, but shivering was produced on the re ascent of the temperature.

In intermittent fever it acts on each access of fever, but not on the malady as a whole, thus offering a strong contrast to quinine.

In the above recorded facts we see an indication of a difference of action between such closely allied bodies which further knowledge may break down, but it would appear that kairin acts on temperature by diminishing the oxygen-carrying power of the hæmoglobin, while antipyrin dilates the vessels of the skin. The idea of the existence of thermogenetic centres is rapidly gaining ground, and we may see in the obvious action of these drugs on the nervous system a reason for supposing that this is one of the ways in which their effect is brought about.

Pasteur's Cure and Prophylaxis of Hydrophobia.

The Paris correspondent of the *Louisville Medical News*, November 21st, 1885, writing under date of November 6th, 1885, makes the following communication:

The last meeting of the Academy of Medicine was crowded to the full to listen to a very interesting communication by M. Pasteur, on that most important subject with which he has been occupied so long, viz: the cure and prophylaxy of hydrophobia. For the last three years M. Pasteur had been engaged in researches in that direction; and after having experimented upon animals (dogs and rabbits) with success by inoculating them with rabic virus, he considered himself justified in applying the remedy to the human subject. Starting from the principle that the rabic virus is localized principally in the nervous centres, he inoculated dogs from fragments of the spinal marrow of dogs infected with hydrophobia; but as such inoculations occupied three or four months before any result could be known, he sought and discovered another procedure, which is at the same time more expeditious and more certain. He trephined the skull

of a rabbit; he then inoculated under the dura mater a fragment from the spinal marrow of a rabid animal, the stage of incubation having lasted fifteen days. He then took a portion of the spinal marrow of the dead rabbit, and with it inoculated a second rabbit, which he had previously trephined as in the first instance. He repeated the operation in a series of from twenty to sixty rabbits, and he then observed that the duration of the stage of incubation became progressively less, until it reached only seven days, and this was established with such precision, that one can say beforehand the very hour the accidents may begin in the subjects experimented on. M. Pasteur observed that since November, 1882, his experiments gave him a long and uninterrupted series of rabid rabbits, and the inoculations performed from the later series produced a stage of incubation which did not last more than seven days. The rabic virus was obtained, as stated above, from the spinal marrow of inoculated rabbits, the virus from which is always perfectly pure, and identical in constitution. The spinal marrow of inoculated rabbits is virulent throughout its length. Portions of this are preserved in vials, the air of which is dried with potash, which is placed at the bottom of the vials. M. Pasteur remarked that after a time the virulence disappeared altogether, and that this disappearance was hastened by low temperatures, so that the older the virus the less virulent it is, and the most recent is very energetic. In practicing inoculation in a dog, by commencing with the oldest spinal marrow and finishing with that of two days old, one succeeds in rendering a subject absolutely insusceptible to rabies. It is thus that M. Pasteur proceeded with a young Alsatian, who was bitten by a dog known to be mad. The operation was commenced sixty hours after the accident. M. Pasteur first took the spinal marrow of an inoculated subject, which was sixteen days old, and with it he practiced thirteen inoculations in ten days, terminating with that of a day old. Joseph Meister, the subject inoculated in July last, and who was then 9 years of age, never felt any indisposition, and is still in good health, although it is now more than a hundred days since the last inoculation was performed on him, and he had been bitten in fourteen places. M. Pasteur has at present under treatment by the same method a young shepherd, who was also severely bitten by a mad dog, and of course the result is not yet known.

In descending from the tribune, M. Pasteur was received with great applause, as he was also on the previous day at

the Academy of Sciences, for his discovery, which is second to none that has as yet been noted in the annals of medicine, if it really turns out to be a genuine cure for this most terrible of all diseases. Notwithstanding the great enthusiasm caused by this discovery, I cannot help thinking that M. Pasteur's inferences are somewhat premature; but time and further observation will alone decide as to its actual merits.

Influence, and Treatment of Adherent and Contracted Prepuce or Phimosis.

Dr. De Forrest Willard, Lecturer on Orthopædic Surgery in the University of Pennsylvania, in the October No., 1885, of the *Archives of Pediatrics*, says that for years he has been brought in daily contact with this class of cases. He reiterates, that while more or less adhesion is an almost constant and normal condition, yet when urinary, choreic, paretic, or any other nervous symptoms develop, a careful investigation should never be omitted, since a direct relation will, in a certain number of cases, be clearly evidenced, and removal of the cause will speedily cure the manifestation. The fact that even circumcision does not relieve the symptoms is undoubtedly true in many instances, and I have never claimed that preputial adhesion and narrowing was anything more than one of several factors which should be carefully scrutinized. Its influence should not be overlooked, and when so simple an operation as stripping the prepuce from the glans by the thumbs, or possibly by the use of a probe, is all sufficient, there can certainly be no argument against removing this one factor. My opinion in regard to the feasibility of drawing back the prepuce in young children, even when the opening seems scarcely pin-hole in diameter, has been greatly strengthened, and circumcision is only necessary when the simpler method described fails to secure a prepuce freely movable over a normal glans. Dilatation, even, is but rarely required, a few moments of continuous pressure soon revealing the mucous layer, adherent, perhaps, just about the meatus, which, when loosened, permits the head to pass through the opening, and the corona is freed with the thumbs. Should temporary paraphimosis occur, two probes, or a hair-pin, slipped beneath the constriction, will easily permit replacement.

Surgery for Piano-Forte Players.

All pianists are aware that the third or ring finger is much weaker and less proficient than its companions. This is a

source of great annoyance to the player, and seriously militates against the dexterity of the hand. It is a well known fact that when, for instance, the middle and little fingers are pressed upon the keys to produce a continuous sound, it is almost impossible to bring the ring finger into intermittent use with a strength sufficient to produce any equality in the tones. The explanation of this is as follows: The common extensor muscle of the fingers which moves the ring finger, is connected by lateral or accessory tendons with the muscles of the neighboring fingers, and when these are held down the accessory tendons prevent the free and independent action of the muscular fibres of the third finger; hence, the clumsy result. These lateral tendons are sometimes found in both hands, often only in one, which, in this case, is usually the right hand. The possibility of removing this restriction in the use of the ring finger, by dividing the accessory tendons, suggested itself many years ago, but it is only of late years that the operation has become common. Dr. Forbes, of Philadelphia, and Mr. Zecker, the Director of the Philadelphia Academy of Music, have both been much interested in the subject, and have done a great deal to make the operation popular. By the divisions of the tendons the liberation of the ring finger is complete. After such an operation, which is often performed on both hands at one sitting, and without the loss perhaps of more than half a drachm of blood, the finger could be elevated an inch higher above the plane of the hand, and could be used with delightful freedom. There was an entire absence of the sense of exertion which was formerly so painful. This resulting liberty is not at the expense of power in any other direction. The operation does not decrease in the least the ordinary functions of the extensor muscle. The operation is comparatively simple, accompanied by no loss of blood and little pain, and promises to become a part of every conservatory course.—*Courier of Health*, Oct., 1885.

Salix Nigra (Aments)—a New Sexual Sedative, for Masturbation, Spermatorrhœa and Ovarian Diseases.

Dr. F. T. Paine, Comanche, Texas, after an active practical use of the floral buds of the common willow tree of our Southern rivers, creeks and lakes, as an anaphrodisiac, calls special attention to its great virtues in the *Transactions of the Texas State Medical Association*, 1885. He uses the fluid extract, in drachm doses, three or four times daily. The first case in which he used it was in 1880. The patient

was a married man who had "undefinable symptoms," referable mostly to the genito-urinary organs, with general neurasthenia. He stated that his sexual desires had never been, and could not be satisfied, that he copulated six times every night and that his wife was in bad health. He was a pitiable object—unable to work or do anything except gratify his passion. He was directed to take a teaspoonful of the fluid extract three times daily, and to report in ten days. He then reported that he could "hardly go to his wife once a week." The doctor has used the agent in a number of like instances with equally satisfactory results. He also reports several cases of confirmed masturbators who have been cured of even desire to indulge in their vice by the same agent. Fresh muscular and mental vigor has retnrned to each of the parties so treated. In cases of simple *hyperæsthesia of the ovaries*—what is too often falsely called ovaritis—it generally acts like a charm. One lady after ten days' use of the fluid extract in teaspoonful doses three times a day, reported:—"If a woman takes that medicine, she don't care if there is not a man in the world." Previously the marital act had given her great neuralgic pain in the ovarian region; now she had none. A sterile, dysmenorrhœal married lady, 35 years old, who suffered intensely one or two days at each menstrual period came under his care in 1882. She was almost maniacal during these periods. The ovaries were prolapsed and intensely hyperæsthetic. Drachm doses of the fluid extract of salix nigra three times daily were prescribed. At the next month the catamenia passed off as pleasantly as a May day, and they have so continued—now over two years. The medicine produced no change in her relations to her husband. The doctor details other cases showing its almost specific value in the treatment of hyperæsthetic ovaries, and says he could add many like favorble reports of cases. Generally speaking, he has found, in cases of hyperæsthetic ovaries, little or no venereal passion to exist during the disease.

Child Weighing One Pound and a Quarter at Birth.

At the meeting of the Medical Society of the District of Columbia, October 14th, 1885, (according to the *Journal of the American Medical Association*, November 21, 1885.) Dr. J. F. Hartigan presented a child three years and nine months old weighing eighteen pounds, who at birth only weighed *one pound and a quarter*. Dr. Brengle, of Winchester, Ill., was the attending physician. Three years ago, after the parents' re-

moval to Washington, Dr. Hartigan first saw the little girl. It weighed between four and five pounds, and has since suffered from several attacks of spurious hydrocephalus, diarrhœa, and dysentery, but now enjoyed good health. He was not aware of a parallel case, and wished to make it a matter of record. The mother has one other child, six years old, healthy, and well developed; both were born at term.

Coca-Leaf Cigars and Cigarettes.

F. E. Stewart, M. D., Ph. G., of New York city, in the *Philadelphia Medical Times*, of September 19th, 1885, after detailing many experiences, adds:

To sum up, therefore, coca smoked seems to produce the same effect on the system as coca taken internally in the form of fluid extract, wine, or elixir, but not in such a marked degree. Coca itself is known to be stimulant, tonic, and restorative to the system in the treatment of various diseases marked by debility and exhaustion. Nervous debility and exhaustion in all its forms, whether caused by disease or excesses, are said to be relieved by it. Fatigue disappears, to be followed by a feeling of indescribable calm and satisfaction, increased strength of brain and muscle, and desire for mental and muscular occupation.

Coca has been used with great success in the treatment of the opium habit. It is also an excellent substitute for tobacco. It has been successfully used in dyspepsia, flatulency, colic, gastralgia, enteralgia, hysteria, hypochondria, spinal irritation, idiopathic convulsions, nervous erethism, and in the debility following severe acute affections. As it is a valuable restorative agent, checking tissue-waste, it is a useful remedy in consumption and wasting diseases generally. It is also valuable in the nervous forms of sick-headache, *migraine*. It is said to be an aphrodisiac.

Now, my object in publishing this article is to introduce coca-leaf cigars to the profession. I have furnished what information I have to prove the cigars are capable of producing the action of the drug. In my own mind, I have no doubts on the subject, though the effects are milder than those resulting from the employment of the fluid preparations of coca internally. I have also summed up the properties said to be possessed by coca as a therapeutic agent. I have produced evidence, in addition to that furnished by Dr. Lewis, that it is of value in the treatment of hay-fever; and, as it is important that the true value of this form of using coca-leaf should be known, I have had some [cigars and ci-

garettes] made, and I will send samples to members of the profession, free of charge, who may desire to test them, and will publish the results, favorable or otherwise, in the medical press.

Non-Restraint System of Hospital Treatment of the Insane.

Dr. Carlos McDonald, Medical Superintendent of the State Asylum for Insane Criminals, at Auburn, N. Y., in the 25th Annual Report of the Institution, ending September 30th, 1884, states that of the 199 patients treated in the Asylum during the year, no patient has been subjected to mechanical restraint of any form, while instances of seclusion, or the use of narcotic drugs as substitutes for restraints, have been of rare occurrence, the daily average amount of seclusion for the year having been but a *trifle over one-quarter of one per cent. of the average daily population*, as against one-half of one per cent. for the preceding year. In fact, there have been continuous periods of nearly two months during which not a single instance of seclusion has occurred. Tendencies to violence on the part of patients have greatly diminished since the total and final abolition of mechanical restraint, two and half years ago, while that which was known as the "refractory" ward, under the system of chains, shackles, handcuffs, camisoles, muffs, wristlets. and "crib" beds, formerly in vogue here, and which, subsequently, under the milder forms of these restraints, then deemed necessary, was called the "disturbed" ward, has gradually changed in character, until now it may justly be classed as a "quiet" ward, although still occupied by our "worst" and most troublesome cases.

The question of mechanical restraint in the treatment of the insane is rapidly settling itself, and the disuse of restraint may reasonably be predicted, in the near future, in every well regulated hospital for the insane. In this Asylum we no longer even think of using it. In fact, a majority of our present corps of attendants have but little or no idea of its mechanism, and would be at a loss to know how to apply it were it placed in their hands for that purpose. In the light of such experience, candor compels the admission that, whereas, I formerly thought mechanical restraint almost a *sine qua non* in the treatment of a certain class of cases, and so advocated, I now not only regard it as unnecessary, but I sincerely believe that such cases may be managed far better and easier without it.

It has been said, in defence of restraint, that American

superintendents are obliged to resort to it because of a greater degree of turbulence manifested by the insane of this country, as compared with that of Great Britain, where, owing to an alleged national difference in temperament, insanity assumes a quieter and less violent type; that, given similar conditions as regards their mental manifestations, any intelligent American superintendent would manage his patients without restraint. This seems plausible, and, formerly, I accepted it as furnishing a rational and satisfactory explanation of the difference in practice between the two countries in the matter of mechanical restraint; but the marked change in the demeanor of patients which I have witnessed here, as the result of an impartial trial of the non-restraint system, has led me to regard the explanation as fallacious. Under the old system, as formerly practised here, could be seen to an extreme degree the manifestations of violence, noise and confusion, which have been characterized as the "American type of insanity," while under the present methods the ordinary conditions of all the wards is one of marked order and quietude; and it may now be said that the prevalent type of insanity here is similar to that described in the British asylums. Our "disturbed" ward has faded out, so to speak, and its departure has been followed by a gradual extension of the means and methods of occupation, embracing agricultural labor, the manufacture and repair of all shoes and slippers used by the patients, of all clothing excepting stockings, our tailor shop being manned entirely by patients; also the manufacture of tinware, as well as glazing, carpentry, painting, etc. With these facts before us, is not the inference a fair one that the "quiet type of lunacy" found in British asylums is *a result* rather than a *cause* of non-restraint? Observations made during my visit abroad last year forced upon me the conviction that in this respect, at least, our English brethren are in advance of some of us on this side the water. But already there are numerous indications of the commencement of a new era in the care and treatment of the insane in this country, and it may safely be predicted that the not distant future will witness a marked modification in the form of construction, organization and methods of conducting our hospitals for the insane. Even now the most ardent advocates of the old system, still more or less prevalent, are, unconsciously, perhaps, gradually diminishing the amount of restraint used, and otherwise modifying their practice in accordance with the spirit of progress which now obtains.

Causes and Treatment of Quinsy.

Dr. F. P. Atkinson says with confidence (in *The Practitioner* for November, 1885), after twenty years' experience, that quinsy is essentially a disease of debility, and is more or less associated with adolescence and a strumous habit. The exciting causes are sexual excesses, bodily fatigue, irregularity of meals, long continued fasts—in other words, nervous and muscular exhaustion. Cold and rheumatism play little or no part in its production, but nervous and muscular exhaustion make the person also liable to take a chill and so rheumatic fever. However, he has rarely, if ever, seen these two coexisting in the same person. [This is a most remarkably twenty years' experience; for on this side of the Atlantic the two so frequently co-exist that, with some practitioners, quinsy is always looked for in the early stages of acute rheumatism.—Editor *Va. Med. Monthly.*] Again, it cannot be cold acting directly on the throat, because laryngitis would then be a much more frequent accompaniment than it now is, and a second attack rarely follows till after the lapse of some months, no matter what the amount of exposure.

The *treatment* can scarcely be termed otherwise than a specific one, since very few, if any, of the cases have gone on to suppuration which have come to Dr. Atkinson at an early period. The effervescing citrates will allay this and all other kinds of glandular inflammations. Give twenty grains of bicarbonate of potassium with fifteen grains of citric acid every four hours in a state of effervescence. Guaiacum (long known to be beneficial in throat cases), is best given in the form of lozenges made up with black-currant jam, in accordance with the pharmacopœia of the Throat Hospital, Golden Square. One of these lozenges should be sucked frequently. Iodine, when applied locally in cases of glandular inflammation, will either reduce the enlargement or hasten the suppuration, according to the stage in which it exists; and a gargle, containing from twenty to twenty five minims of the tincture to the ounce of water, will be found particularly useful. This may be used by taking a little in the mouth, and shaking the head from side to side. Port-wine is an essential part of the treatment; take from four to six ounces in the course of the day, besides plenty of beef-tea and milk. By this method resolution is almost always brought about, and the patients are, with scarcely a single exception, able to resume their usual duties about the fourth day. The usual duration under the old methods of treat-

ment was almost always from nine to ten days. Do not be discouraged if the patients complain of feeling no better, or even worse, for the first two days, but persist with it all the same, and they will be certain to meet with the success they and their patients desire. Though the bowels are almost always confined, it is not advisable to administer aperients, since as soon as recovery takes place they are moved as regularly as possible, without any extraneous assistance. When suppuration has commenced in the tonsils (which may be looked for about the sixth day, and made out by great throbbing in the ear on the affected side), it is best to omit the effervescing citrates and guaiacum lozenges, and depend upon the iodine gargle, together with the port-wine and beef-tea. Suppuration is by this means hastened and suffering curtailed.

Leprosy Not Contagious.

The daily papers of November 25th contained an Associated Press telegram from Washington, D. C., stating that Consul-General Putnam at Honolula has sent to the Department of State an exhaustive article on the subject of leprosy, written by Dr. George L. Fitch, who, the Consul-General says, has enjoyed rare opportunities to become thoroughly acquainted with the malady. For years he had charge of the Government Hospital and Leper Settlement on the island of Molokai. Dr. Fitch believes himself justified in saying that leprosy is hereditary, and cannot be communicated by one person to another under any circumstances.

Cholera Does Not Attack Workers in Tobacco.

According to the *American Analyst*, cholera has failed to strike a single one of the four thousand women employed in the National Tobacco Factory at Valencia, Spain, though the disease raged violently in that city; and the *Medical World* recalls that tobacco workers were also noticed to enjoy exemption from attack during an epidemic at Amsterdam. Such a suggestion as this could not be better studied than right here in Virginia, North Carolina, Kentucky and Tennessee. What is the observation of our readers in these States where tobacco factories are numerous?

Hospitals in Austria.—Austria has 159 public and 375 private hospitals, with a total of 29,167 beds. On an average, one out of every eighty-two of the inhabitants seeks hospital relief.

Book Notices.

Urinary and Renal Derangements and Calculous Disorders. Hints on Diagnosis and Treatment. By LIONEL S. BEALE, M. D., F. R. S., F. R. C. S., Professor Principles and Practice of Medicine, King's College, etc. Philadelphia: P. Blakiston, Son & Co. 1885. 12mo. Pp. 356. Cloth. Price, $1.75. (For sale by West, Johnston & Co., Richmond.)

This work serves a practical want, long felt by the profession. Written by an author whose special ability is recognized the world over, it cannot fail to attract the attention of every specialist in the line of urinary disorders and general practitioners. While enough of the purely scientific is given to satisfy the wants of most students, its every page of practical instructions will make it the guide-book of diagnosis and treatment for the busy doctor. Plain rules for examinations and easy tests for detection of adventitious products in the urine are detailed, and the range of diseases that is considered is just such as will serve the wants of the profession generally. We most cordially commend this book to our readers, feeling that we are doing them a service in thus announcing this edition, which is published simultaneously in London and Philadelphia by special arrangement with the author. But we cannot conceive what could have induced the author or the publishers of such a work to let it go from the press without a full index.

Reference Handbook of the Medical Sciences. Illustrated by Chromo-Lithographs and Fine Wood Engravings. Edited by ALBERT H. BUCK, M. D., of New York City. Vol. I. New York: William Wood & Co. 1885. Royal 8vo. Pp. 808. (From Publishers.)

This finely printed, double-column, small, but clear type book outstrips any competitor in the same field. It is practically a *dictionary of medicine.* It is to be completed in eight volumes of about the same number of pages as this volume. As the title-page puts it, this is to be "a complete and convenient work of reference for information upon topics belonging to the entire range of scientific and practical medicine," "consistsng of a series of concise essays and brief paragraphs, arranged in the alphabetical order of topics of which they treat, prepared by writers who are experts in their respective departments"—including physicians, chemists, botanists, counsellors at law, etc. For instance, Volume I has

contributions from ninety distinguished living American authors, and yet the list of subjects considered in it are only those which, in their alphabetical arrangement, are included between the word Aachen, on the first page, and Cataract, on page 808. While the greater share of space is given to matters of practical importance, such as diagnosis and treatment, provision is made for such related subjects as medical botany, climatology, embryology, physiological and pathological chemistry, applied anatomy, medical jurisprudence, military and naval surgery, etc., etc. A reasonably full index of subjects discussed will be appended to the eighth and last volume, so as to make up for any deficiencies that may occur in this respect while the work is passing through the press. This is made necessary by the fact that all the manuscripts of articles to appear are yet not in the hands of the Editor. This work, when completed, will be invaluable to medical men generally, and no State, city or public general library can afford to be without it. It is just such an encyclopædic work on medical subjects as has long been wanted by the medical profession and the general scientific and literary student.

System of Obstetric Medicine and Surgery, Theoretical and Clinical. By ROBERT BARNES, M. D., Obstetric Physician to St. George's Hospital, etc., and FANCOURT BARNES, M. D., Physician to Royal Maternity Charity, and to British Lying-in Hospital, etc. Illustrated with 231 Wood Cuts. Philadelphia: Lee Brothers & Co. 1885. Leather. 8vo. Pp. 884. (For sale by Messrs. West, Johnston & Co., Richmond.)

The immediate purpose of this work is to serve as a handbook for the use of the student and practitioner. Dr. Robert Barnes' "Obstetric Operations and his other publications are of such value as, in great measure, to shape many obstetric procedures, and have been so sought after and adopted as authoritative that the profession generally have long been anxious that he should commit his teachings to a systematic work, covering all the subjects usually treated in a text-book on obstetrics. The present work satisfies this demand. His son's assistance has been of great help in making this one-volume work the most generally useful one now in print, both as a text-book for the student or lecturer, and as the favorite reference-book of the practitioner. The great excellence of this "System of Obstetrics," as it appears to us, consists in the full adoption of utilitarian principles, and the perfectly systematic character of the teachings, making it easy to learn, and retain what is learned. The work contains

just enough of discussion on important points to hold the attention of the reader, while every page imparts some item of instruction which makes each practitioner wish he had known *this* yesterday, and to feel that he may need *that* to-morrow. It is scarcely a venture of prediction that this book, when its contents become known, will be *generally* adopted by practitioners. Of course there are omissions of reference to some odds and ends of practice we would like to have seen filled; for instance, no allusion is made to veratrum viride in puerperal convulsions, nor to the country doctor's favorite resort to slippery elm sticks, both as bougies and dilators, instead of flexible male bougies, for introduction into the womb to induce labor, etc. But there is so much that is good in the book that we ought not to have the appearance of detracting from its merits by referring to any such minor omissions.

System of Practical Medicine by American Authors. By WILLIAM PEPPER, M. D., LL. D., Provost and Professor of Theory and Practice of Medicine, and of Clinical Medicine, University of Pennsylvania. Assisted by LOUIS STARR, M. D., Clinical Professor of Diseases of Children in Hospital of University of Pennsylvania. *Vol. III. Diseases of the Respiratory, Circulatory and Hæmatopoietic Systems.* Philadelphia: Lea Brothers & Co., 1885. 8vo. Pp. 1,022. Leather. (For sale by Messrs. West, Johnston & Co., Richmond,)

This standard "System of Practical Medicine is growing in professional favor with the issue of each volume. This volume opens with a chapter on "Laryngoscopy and Rhinoscopy," by Dr. Carl Seiler, and the succeeding chapters on each of the diseases of the respiratory system are as complete, and prepared by authorities as eminent. The same is affirmed of the sections or chapters in each of the two other Parts of this volume, as indicated by the title. Throughout the work, evidences of great care on the part of the Editors and Authors are manifest so as to bring its teachings up to the latest day, and to make it thoroughly scientific as well as practical—useful alike to the student and practitioner. Our lack of space and the great pressure upon our book-notice department at this time prevents even an opportunity to state the table of contents. Hence we have to satisfy ourselves with the simple statement that this work must be accepted as the standard one on Practice of Medicine that is likely to issue from the American press for some years to come. Twenty-seven distinguished American practitioners, besides the Senior Editor, are contributors to the volume

now before us. The publishers, as usual, have done their part magnificently well. A useful and quite complete index is appended to this book, as to each of the other volumes of the System.

Principles and Practice of Surgery. By JOHN ASHHURST, Jr., M. D., Professor of Clinical Surgery, University of Pennsylvania, etc. Fourth Edition, Enlarged and Thoroughly Revised, with 597 Illustrations. Philadelphia: Lea Brothers & Co. 1885. 8vo. Pp. 1,118. Leather. (From Publishers)

"Ashhurst's Surgery" has for years held a prominent place either as the text- or reference-book for college students; and by a very large proportion of the profession it is ranked among the best of authorities on the subject. Whatever position of high authority former editions have gained, the present edition must be placed in a niche still higher; for its revision in many respects has increased the range of subjects considered, and the latest of improved operations have been inserted. The great variety of surgical diseases or conditions that are treated of, and the practical manner in which they are dealt with make the work a good one-volume book for adoption by general practitioners who have not the means to buy more than one authoritative generally useful surgical volume. Dr. Ashhurst has likewise embodied enough of details as to the theories of surgical diseases to satisfy the wants of those who have a speculative turn; but it is *as a practical surgery* that we specially commend it to the attention of any in search of such a work. The numerous wood cuts throughout the book add very materially to the value of the text. A well arranged index is appended. The general style of the chapters consists in description of disease or injury, diagnosis and the best plan of treatment. Dr. Ashhurst may be classed among the prudently conservative surgeons, possessed, however, of sufficient boldness not to defer operation too long.

Inebrism, A Pathological and Psychological Study. By T. L. WRIGHT, M. D., Member American Association for Cure of Inebriates. Columbus, O. 1885. 12mo. Pp. 222. Cloth. Price $1.25. (From Author, Bellefontaine, Ohio, by whom it is for sale.)

The author relegates the moral questions relating to inebriety to other writers, and proceeds to delineate the effects of alcohol upon the human, physical system, showing to what degeneracy of mind and body one who indulges in the alcoholic habit is almost inevitably brought. It is well writ-

ten, scientific rather than emotional in teachings, and would produce a profound impression for good if doctors would only induce their recoverable inebriates to read the book. Such a book as this would be a valuable gift to some young friends whose dispositions lead them to over-indulgences, but who, if properly informed as to the mental and physical dangers of alcohol, could be saved from drunkards' graves and disgraceful crimes that result from alcoholism.

Cancer: A Study of 397 Cases of Cancer of the Breast. With Clinical Observations. By WILLARD PARKER, M. D. New York: G. P. Putnam's Sons. 1885. 8vo. Pp. 104. Cloth. Price, $1.25. (For sale by West, Johnston & Co., Richmond.)

This is about the latest contribution to medical literature of the lamented author. A study of his cases leads him to name as the four principal causes of development of cancer: (1) Luxurious living and particularly excess in animal food; (2) local irritation of an epithelial surface; (3) mental affliction; and (4) dysmenorrhœa and other uterine irregularities. A thorough discussion is here to be found of many scientific questions still *sub judice;* but, as to treatment, little of practical importance is mentioned that is not familiar to all surgeons. His recommendation, of course, is early and complete excision. Seeing the causes as named above, something may be done as a prophylaxis, so-called—avoid unnecessary luxury in mode of life, abstain from food rich in nitrogen, take sufficient exercise and avoid irritations of suspicious surfaces, as by corsets, etc., cultivate cheerfulness, and regulate menstrual irregularities. A tabular statement of the 397 cases is appended. As a faithful record of facts, no work can rank higher.

Use of the Microscope in Clinical and Pathological Examinations. By Dr. CARL FRIEDLAENDER, Privat-Docent in Pathological Anatomy at Berlin. Second Edition, Enlarged and Improved, with a Chromo-Lithograph. Translated with the Permission of the Author, by HENRY C. COE, M. D., M. R. C. S., L. R. C. P., Pathologist to Woman's Hospital in the State of New York, etc. New York: D. Appleton & Co. 1885. 12mo. Pp. 195. Cloth. (For sale by West, Johnston & Co., Richmond.)

This is the very book on microscopy that the general run of practitioners have long been wanting. Many doctors recognize their ignorance on the subject who, while neither expecting nor caring to become expert microscopists, do want to know in plain language that is easily intelligible,

how normal structures and abnormal tissues look under the microscope. This book is a great help to such a practitioner, and will do much to popularize the subject of microscopy in questions of diagnosis, etc. An improvement in the next edition would consist in wood cuts to illustrate the appearance of objects described. The impressions received through the eye would greatly assist the memory in recalling the descriptions given in the text; but this improvement would necessarily increase the cost of the book considerably. A frontispiece, however, presents, in a colored plate, a comparison of the most important and characteristic pathogenic schizomycetes, such as those of pyæmia, tuberculosis, typhoid fever, relapsing fever, anthrax, pneumonia, gonorrhœa, erysipelas, putrefaction, etc.

Treatment of Opium Addiction. By J. B. MATTISON, M. D., Member American Association for Cure of Inebriates, etc. New York: G. P. Putnam's Sons. 1885. 12mo. Pp. 45. Cloth. Price, 50 cents. (For sale by West, Johnston & Co., Richmond.)

This monograph—mainly a paper presented to the American Association for the Cure of Inebriates at its annual session, October—1884, closes with the encouraging remark that "repeated experience warrants the assertion that every case of opium addiction free from organic disease, and in which there is an earnest desire to recover—be the extent and duration what it may—admits of prompt and positive relief." The author relies mostly on bromide of sodium in continued full doses. The treatment should be begun several days prior to the entire abandonment of the opiate. His initial dose of the sodium bromide is ℥j twice daily, increasing it to one hundred grains twice daily, in from five to seven days. During this time, gradually decrease the daily doses of the opiate until about tenth or twelfth day, when it may be entirely abandoned. The experience of the author is valuable, because of his great opportunities, and his directions should be tried.

Technology of Bacteria. By CHARLES S. DOLLEY, M. D. Boston: S. E. Cassino & Co. 1885. Embellished Cloth. 12mo. Pp. 263. Price $2. (From Publishers).

This is peculiarly a book "for the times," when bacteria investigations are engaging the special attention of doctors and scientists everywhere. It details, for the most part, the methods adopted by Koch, the lamented Pasteur, Erlich,

etc., in studying the subject, and gives concise directions as to where to look for, and how to investigate especially those bacteria which have a pathological significance. While very useful to the reader, who simply wishes to acquire general information, to the laboratory student it is wanting in one essential of all good text-book that is so full of inportant details and formulæ—a thorough index. One would lose much time in looking up a piece of information which he knows he saw in the book when reading it. The diseases and conditions specially considered in their relation to bacteria as causative agents are anthrax, cholera, glanders, hog-cholera, hydrophobia, leprosy, malaria, malignant œdema, septicæmia of domestic mouse and of rabbits, syphilis, tuberculosis, typhoid fever, whooping cough, dental caries, chicken cholera, diphtheria, erysipelas, furuncle, gonorrhœa, osteo-myelitis, pneumonia-crouposa, recurrent fever, yellow fever, etc. The work is fully up with the latest discoveries, and will be instructive to every ætiologist.

Renal and Urinary Affections. By W. HOWSLIP DICKINSON, M. D., Cantab., F. R. C. P., Physician to, and Lecturer on Medicine at St. George's Hospital, etc. New York: William Wood & Co. 1885. 8vo. Pp. 343. (For sale by West, Johnston & Co., Richmond, Va.)

This exceedingly practical work on "Miscellaneous Affections of the Kidneys and Urine" is the August issue, 1885, of the remarkably well selected series composing "Wood's Library of Standard Medical Authors." The general range of subjects covered by Dr. Dickinson in this work, which he has written chiefly from a clinical standpoint, may be inferred from the following mention of topics named in the titles of the twenty-four chapters: Renal abscess, pyelitis, suppurative perinephritis, thrombosis and embolism, relations, pathology and varieties of renal tumors, malignant disease of the kidney, tubercle of the kidney, hydronephrosis and pyonephrosis, cystic disease, renal calculi—their causes, pathological consequences, clinical relations, symptoms, results and treatment,—misplacement, displacement and mobility of the kidneys, urinary paraplegia, diseases of ureters and large blood-vessels, renal parasites, chyluria, intermittent hæmaturia, excess of earthy salts in urine, albuminuria, hæmaturia and suppression of urine. The work is illustrated by sixty-three wood-cut figures. A good index materially assists the reader in finding references to subjects about which consultations are sought.

Wasting Diseases of Infants and Children. By EUSTACE SMITH, M. D. Fourth Edition. New York. Wm. Wood & Co., 1885. 8vo. Pp. 278. (For sale by West, Johnston & Co., Richmond.)

This April number, 1885, of "Wood's Library of Standard Medical Authors" presents a most useful book for every practitioner. This fourth revision of Dr. Eustace Smith's celebrated work bears date of December, 1883. It is a thoroughly practical work; and while it is by no means exhaustive as to the range of diseases discussed, still the general principles everywhere inculcated are so forcibly stated that the lessons may be made of every-day use in treating wasting diseases that are scarcely more than mentioned in this book. General atrophy from insufficient nourishment, chronic diarrhœa, chronic vomiting, rickets, inherited syphilis, mucous disease, worms, chronic pulmonary phthisis, caseation of lymphatic glands, and the diet of children in health and disease, are the titles of the several chapters.

The Oleates—An Investigation into Their Nature and Action. By JOHN V. SHOEMAKER, A. M.,, M. D., Lecturer on Dermatology, Jefferson Medical College, etc. Philadelphia: F. A. Davis, Att'y. 1885. 12mo. Pp. 121. (From Publisher.)

This little book is useful to the practitioner and pharmacist. It contains a resumé of Dr. Shoemaker's several papers already published on the subject, etc., and also some new matter. It is divided into four sections—on the history and origin of the oleates, the process of their manufacture, their physiological action, and therapeutic effects. Especially are the oleates specifically recommended for treating skin diseases—being better than ointments and lotions.

Treatise on Asiatic Cholera. Edited and Prepared by EDMUND CHARLES WENDT, M. D., Curator and Pathologist of the St. Francis Hospital, New York, etc. In Association with DRS. JOHN C. PETERS, ELY McCLELLAN, JOHN B. HAMILTON, and GEO. M. STERNBERG. Illustrated with Maps and Engravings. New York: William Wood & Co. 1885. 8vo. Pp. 403. (From Publishers.)

This is the May number, 1885, of "Wood's Library of Standard Medical Authors." Althongh prepared in haste at the request of the publishers, so as to be in time to meet the demand of the dreaded epidemic of cholera, which was to have visited the United States during the past Summer, but which did not come, the work is remarkable for its fulness, accuracy of description, and the utility of its instructions as

to diagnosis, prophylaxis, and treatment. Studies of the recent epidemic in Spain and other Eastern countries have added nothing to the literature, nor of value as to treatment. Inoculation theories have been virtually killed with the inglorious failures of Ferran's so-called experiments; but Koch's comma-bacillus theories are noted as a decidedly progressive step. The historical section by Dr. Peters, covering over 100 pages, is very thoroughly written up, and portions of it have the interest to the reader of a historical novel.

Six Lectures upon School Hygiene. Boston: Ginn & Co. 1885. 12mo. Pp. 201. Cloth. Price 88 cents. (From Publishers.)

This book is issued by the Massachusetts Emergency and Hygiene Association, and consists of six lectures delivered under its auspices to teachers in public schools. The first one is on School Hypiene, by Frank Wells, M. D., and is one which we wish our school-boards everywhere would read. Dr. F. W. Draper's lecture on Heating and Ventilation is no less valuable. The Use and Care of the Eyes, especially during School Years, is a lecture by Dr. C. H. Williams, no less instructive and suggestive of good. Lecture IV is by Dr. G. B. Shattuck, on Epidemics and Disinfection, which contains information that should be in the possession of every head of a family. Dr. Frank Wells' lecture on Drainage is likewise instructive. Dr. C. F. Folsom's lecture on The Relation of Our Public Schools to the Disorders of the Nervous System should be made familiar to parents, teachers and pupils. Such a course of lectures as this would prove an invaluable help to every family physician in preserving the health of his patients, and save many a parent an anxious term of nursing the sick. Such a book as this ought to be adopted as a text-book for every association of teachers. We wish we could persuade our schools to adopt it.

Manuel des Injections Sous-Cutanees. (Manual of Hypodermic Injections. Par BOURNEVILLE, Médecin de Bicêtre, et BRICON, Docteur en Médicine. Second Edition, Revised and Enlarged. Paris: Librairie du Progrès Médical. 1885. 32mo. Pp. xl-214. Paper. Prtce 2½ francs; in boards, 3 francs. (By mail, from Authors.)

This little work is a perfect monograph on hypodermic injections, detailing the diseases in which they are best used, and the numerous drugs and modes of using those that have

been used subcutaneously. It is illustrated with fifteen wood-cuts, showing mostly the different forms of syringes that are most desirable. The "Manual" would prove exceedingly serviceable to the practitioner who is fond of the use of the hypodermic syringe. The index is thorough—arranged, both as to the medicine to be used and the dose. Many excellent formulæ are scattered throughout the little volume. It is fully up to date—containing even directions as to the hypodermic use of kairin, thallin, antipyrin, etc.

Poisons: Their Effects and Detection. By ALEXANDER WYNTER BLYTH, M. R. C. S., F. C. S., etc., Public Analyst for the County of Devon, etc. With Tables and Illustrations. Two Volumes. William Wood & Co. 1885. 8vo. Pp. 668. (For sale by West, Johnston & Co., Richmond, Va.)

This "Manual for the use of Analytical Chemists and Experts" opens with an "introductory essay on the growth of modern toxicology, which contains much entertaining instruction for the general as well as professional reader. The whole work as now presented, Mr. Blyth tells us in his Preface, "completes an entirely rewritten and greatly enlarged second edition of the Author's '*Practical Chemistry.*'" While the chemistry of all the articles mentioned is given, with details as to the mode of their detection, etc., the fact that this is an excellent work on chemistry does not so much strike the reader until his attention is specially directed to it as the fact that it describes the history and actions of poisons and the means of treating the effects. In short, it is a work exactly suited to the wants of the practitioner of medicine.

But unhappily, the publishers of this very valuable "Library of Standard Medical Authors" advertise that none of the publications of this series are for sale separately. To get any of them, the purchaser must be an annual subscriber to the "Library." We are satisfied that the books thus far so well selected would find a much wider sale if they could be purchased separately, and we are surprised that the publishers do not consent to such a subscription sale. The two volumes just now under notice are the June and July numbers, 1885, of "Wood's Library."

PAMPHLETS, REPRINTS, ETC., RECEIVED, for which we have no room for fuller notice, etc.; but most of which can be obtained by enclosing a letter stamp for pamphlet to the respective authors named.

Diagnosis and Treatment of Chronic Nasal Catarrh. By GEORGE MOREWOOD LEFFERTS, A. M., M. D., Professor of

Laryngology and Diseases of the Throat, College of Physicians and Surgeons, New York, etc. St Louis: Lambert & Co. 1884. 12mo. Pp. 49. Cloth. [This is a handsomely issued reprint from the *Medical News*, of April 26th and May 3d, 1884, and from *American Clinical Lectures*, Vol. II, No. VI, of three excellent clinical lectures delivered at the College of Physicians and Surgeons, of New York, in which the special value of "Listerine" in the treatment of diseases is prominently and justly brought out. Mumerous well-executed engravings of instruments, positions for examinations, diseased appearances, etc., add greatly to the interest of the pages.]

Report of the Board of Health of the State of Alabama for the Years 1884 *and* 1885. Paper. 8vo. Pp. 527. 1885. (From Dr. Jerome Cochran, Alabama State Health Officer, Montgomery, Ala. Besides statistical information of much value, the report is specially valuable as giving full accounts of the recent epidemic in Alabama of yellow fever and small-pox, accompanied by many notes and suggestions of general use to practitioners. Dr. Cochran seems to have fared badly at the hands of his Pensacola brethren in regard to his reports of yellow fever there.)

Laws of Michigan Relating to the Public Health in Force September 8th, 1883. Paste-board. 8vo. Pp. 122. Issued by the State Board of Health of Michigan.

Hard Chancre of the Tonsil. By Frank Donaldson, M. D., Baltimore, Md. (Erom *Medical News*, Aug. 15th, 1885.) 12mo. Pp. 15. [The diagnostic table on page 13, between syphilis and cancer, is useful.]

Therapeutics of High Temperatures in Young Children. By Wm. Perry Watson, A. M., M. D., Jersey City, N. J. 8vo. Pp. 13. (From *Arch. Pediatrics*, Sept., 1884.) [Most attention is given to the value of cold water either by sponging, the douche, bath, the pack, enemata, rubber coil, or rubber cot. Aconite, quinine and antipyrin are the medicines commended.]

Submucous Laryngeal Hemorrhage. By E. C. Morgan, M. D., Washington, D. C. 12mo. Pp. 3. (From *Med. Record*, March 21st, 1885.) [A case due to straining of voice in singing—cured.]

Tracts on Massage. No. 1: *The Art of Massage.* By Benj. Lee, M. D., Philadelphia, Pa. 12mo. Pp. 40. Price, 25 cents. [Translated from treatise of Dr. Albert Reibmayr, of Vienna. A useful tract. There are to be seven.]

VIRGINIA MEDICAL MONTHLY,

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LANDON B. EDWARDS, M. D.....Editor and Proprietor.

Original Contributions solicited from all sections; but the Editor does not hold himself responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

International Medical Congress.

Most of our exchanges have had their say about the meeting of the International Medical Congress in Washington, D. C., during the year 1887. Our opinion of the whole matter is that a foolish degree of bitterness has characterized most of the debate that has been going on in some of the leading journals as to whether the "original committee" or the committee apppointed by the American Medical Association should arrange the programme for the Congress. The manner of conducting the discussion in some instances has been disgraceful to American medical journalism, and offensive to gentlemen everywhere, so that their voice has rarely been heard. They have not wished to be considered as participants in the disreputable proceedings, and certainly have sought to avoid that notoriety which comes of an association with either party in a rowdyish fight. Hence, when their names have been mentioned in connection with any position in the arrangement for the Congress they have, for the most part, promptly tendered their resignations. Gentlemen, as a rule, seek to retire from the scene of such knock down and drag out rows. But such silence on the part of the larger and conservative element of the American profession is not to be taken as approval of, or acquiescence in the actions of those who have been most prominent in seeking to destroy rather than build up the right.

Whatever may have been the honest differences as to the plan of organizing for the success of the Congress, it is un-

deniable that the common sentiment of the American profession favors the holding of the session in Washington at the time appointed in 1887. But such has become the bitter hatred of each extreme faction of the profession towards the other that it is evidently out of place now to look to amicable terms without the intervention of a third party, representative of the conservative, law-abiding element of the profession which far outnumbers both of the contending factions. Existing factions must be ignored for the common good. The black flags that flaunt in their fronts must be torn down, and those who bear them must be put in subjection until peace is restored. The cunning devices of low politicians must be frowned upon, and a sense of an honorable competition for success established.

We looked hopefully to the action of the Committee that met in Washington early in September for a harmonious and satisfactory solution of the honest differences between parties, but that Committee was guilty of the most injudicious act that we could have supposed a body of intelligent gentlemen, intent on peace making, could have planned. In its resolution to permit no change of a plan which was known to be unsatisfactory in its working, the Committee exhibited a judgment that was "childish weak."

The proper course to pursue—now that there seems to be so little reasonable hope of a successful settlement of differences between existing parties in time to inaugurate proper measures for the assembling of the Congress—seems to us to be the calling of a meeting of the American Medical Association in extraordinary session, rescind all resolutions relating to the Congress, except the one of invitation to meet in the United States in 1887, dismiss all committees that have been appointed, and declare as null and void of all their acts having reference to the Congress, and then proceed *de novo*.

The Association can then organize the formation of a Committee on organization of the Congress—said Committee to be composed of one, two or three members of each State and Territorial Medical Society in affiliation with the American Medical Association. These committeemen could be immediately appointed by the Presidents or other rightfully appointive power of each State or Territorial Society. The committeemen so appointed could have an early meeting for organization, and as such a Committee would be fully represenative of the regular American profession, it would be safe to confer upon it plenary powers to plan and to act. Such a united committee could scarcely be so cor-

rupt as to be purchaseable, or led to adopt measures which did not reflect the wishes of the profession throughout the country. Such a Committee would be apt to recognize that codal questions were not to be tolerated in their discussions and plans to do the greatest amount of good.

Of course we do not undertake in this note to detail plans for organization of the proposed committee. That would be premature, and our space does not permit us to do so. But if some such suggestion as we have thrown out were acted upon immediately, a thorough organization could be effected by June, 1886, which would leave about a year before the session of the Congress, and this would be time enough to allow for the preparations of reports to be presented.

Lead Poisoning Among Sewing Men and Women.

Dr. Arthur V. Meigs, of Philadelphia, Physician to the Pennsylvania Hospital, has a note under the form of "a clinical lecture" on this subject in the *Medical News* (November 21st, 1885), with the title of "An Unusual Cause of Lead Poisoning," which should attract attention. As he entered the waiting room of the ward, he noticed a man seated upon a bench, looking very pale, and with an expression of great pain upon his face. He said he had violent pain in the abdomen. As he protruded his tongue for inspection, his breath had a heavy disagreeable odor. He had had no passage from his bowels for five days, and had been constipated for some time past. There was also upon both the upper and lower gums, the characteristic blue discoloration of lead poisoning. The man said he was a tailor, and had not done any other sort of work for a long time. Nothing could be learned tending to show that his drinking-water was in any way contaminated, and he strenuously denied using any leaden implement or handling the metal in any shape. Later, the Doctor was told that Dr. H. C. Wood used to relate in his lectures at the University of Pennsylvania, that he had attended sewing women suffering with lead poisoning contracted from biting thread, which it was found was weighed with sugar of lead. Upon asking at a large tailoring establishment in Philadelphia, Dr. Meigs was told that much of the sewing silk used now-a-days is treated with sugar of lead to give it the desired weight; and then the Resident Physician, Dr. Penrose, found in the *Half-Yearly Abstract* for 1866 (from July to December), an article by M. Chevallier, giving an account of how thread was treated with lead, and

how women using it suffered from lead poisoning. The patient under consideration undoubtedly had the disease from the use of thread which had been treated with sugar of lead. Dr. Meigs finished his lecture by advising the use of morphine to relieve pain; then Epsom salts to relieve constipation; and then iodide of potassium to eliminate the poison from the system.

This record has an important suggestive bearing in general practice. It is not altogether improbable that some of the cases of constipation and agonizing abdominal pain met with in sewing women and tailors are due to just such a cause. The *colica* pictonum is sufficient to awaken the suggestion of lead poisoning in such persons, although there be no blue line along the gums, wrist drop, etc. It is a very common habit for sewing persons to bite off the threads they use and keep portions of them in their mouth to chew on as a quid. Family physicians in their talks to families about household hygiene should keep their patients warned about such a possible result of improperly using threads; and in doubtful cases of persistent constipation, with abdominal pain, resembling colica pictonum, it would be well to resort at once to iodide of potassium, along with remedies to relieve pain and constipation. We are satisfied that in our professional rounds we have seen cases that would have been more speedily relieved by such measures than by the vacation plan of treatment which we have advised, under the impression that the trouble was due to sedentary habits, leaning forward in cramped positions, etc.

Trained Nurses—State General Hospital.

Among the many advantages resulting from the establishment of a State General Hospital should be the organization in connection with it, of a training school for nurses. Intelligent nursing has become one of the necessities of civilization. What practitioner has not appreciated the help; what patient has not experienced the comfort of a nurse who can skillfully dress a blister, make a poultice, use a catheter, give an enema and understand the dietetic and hygienic requirements, and who knows the usual doses, effects and antidotes of the common drugs? The presence of such a helper, in either country or city practice, is beyond estimate.

The profession in the South has been slow to appreciate the importance of establishing a training school for the education of our own people to do this important work. The services of those trained in the Northern schools are in such

constant demand at home that nothing short of unheard of prices can tempt them so far away; and this condition of affairs is likely to grow worse, as people everywhere are becoming educated to appreciate more and more the services of this class of trained help. It is a lucrative and fitting field for woman's work. In almost every county in the South there are one or more able bodied, intelligent women, who, after a little training, would become invaluable to the physicians and sick of the community. In many sections, there are enterprising surgeons who could do surgical and gynæcological work with the aid of such help. Without it, they cannot operate for vesico-vaginal fistula, etc., because they must neglect other practice to give the requisite attention to the after treatment. With a nurse who knows the importance and who can take the necessary steps in the physicians absence to secure perfect drainage of the bladder and like emergencies, such cases would be within the province of all. In obstetrical practice, how often does the practitioner have to remain with the patient for days, for the simple purpose of using the catheter? Only recently a medical friend consulted us as to the expense of keeping his sister here for a few months to render her an efficient helper. The information imparted to these nurses would through them be disseminated throughout the community in which they work, and wide-spread benefit would result. Time and again we have been appealed to in urgent cases to send trained nurses to the springs, seaside resorts, country homes, etc. In many cases, the impossibility of getting such as we can honestly recommend makes us feel that we cannot too earnestly or too often force this question upon the attention of the medical profession; and we confidently expect and hope, when the State General Hospital becomes an assured fact, that this field of work, so rich in good results, will be properly utilized.

American Public Health Association.

The thirteenth annual meeting will be held in Willard's Hotel Hall, Washington, D. C., commencing Tuesday, December 8th, 1885, at 10 A. M. The programme is a most attractive one. Mr. Henry Lomb, of Rochester, N. Y., offered the sum of $2,800, to be divided into four prizes of $500 each for the best essays, and four of $200 each for the next best essays, presented before October 15th, 1885, on the following topics: (1) Healthy Homes and Foods for the Working Classes; (2) Sanitary Conditions and Necessities of School-Houses and School-Life; (3) Disinfection and In-

dividual Prophylaxis against Infectious Diseases; and (4) Preventable Causes of Disease, Injury and Death in American Manufactories and Work-Shops, and the Best Means and Appliances for Preventing and Avoiding them. In competition, 59 essays have been presented. Mr. J. C. Ginn, of Concord, N. H., is Secretary of the Association, but until December 11th his address will be Washington, D. C. The indications are very encouraging as to the usual success of the session.

Visiting Lists for 1886.

Messrs. Lindsay & Blakiston's List is ready. Besides ruled pages for names of patients, the dates and character of attention, etc., it contains lists of common poisons and their antidotes, of new remedies, diagrams for diagnosing diseases, Marshall Hall and Sylvester's methods in asphyxia, etc. The popularity of this "List" is attested by the fact that this is its thirty-fifth year of publication. Its flexible cover has a pocket for small papers, and is closed with a tuck, Price, for 25 patients weekly, $1; 50 patients, $1.25; 100 patients, $2; 50 patients, 2 vols., $1.50. There is also an interleaved edition.

Leonard's Physician's Pocket Day Book, bound in red morocco, with flap, pocket and pencil loop, price, postpaid, $1, published annually by the *Illustrated Medical Journal Co.*, Detroit, Mich., is now in its ninth year. It is good for *thirteen* months, and accommodates daily charges for fifty patients, besides having cash department, and complete obstetric records. There are columns for diagnosis, or for brief record of treatment following each name-space. Name of patient needs to be written but three times in a month. The book is of convenient size for carrying bill-heads or currency-bills without folding. A copy of the *Illustrated Medical Journal* for one year, or of the paper edition of *Leonard's Dose Book*, will be sent free on all orders sent to the publishers.

The Medical News' Visiting List is a complete pocket-book of useful memoranda for physicians and surgeons, with blanks suitable for keeping the professional and business records of a practice aggregating thirty patients per day. Wallet form, handsome red seal binding, tucks, pocket, pencil and rubber, $1. With patent thumb-letter index for rapid use, 25 cents additional. This new candidate for professional favor, it seems to us, combines more of the advantages, and has fewer of the worthless contents, of many

"visiting lists" than any that we know of. The compiler has carefully studied the actual needs of a practitioner in this "List."

Dr. S. G. Dabney,

Late of Charlottesville, Va., has just been elected Professor of Physiology, and Lecturer on Diseases of the Eye and Ear in the Hospital College of Medicine, of Louisville, Ky., and at once assumes his chairs. He has recently returned from the principal Medical Schools of Europe, where he has been to make special preparations for such a position. Dr. Dabney is a brother of Dr. Wm. C. Dabney, the worthy President of the Virginia State Board of Medical Examiners, and among the most distinguished of Virginia's medical scholars and practitioners. Dr. S. G. Dabney is a Fellow of the Medical Society of Virginia, and is the appointed Reporter on Advances in Ophthalmology and Otology for the session of 1886.

The Rappahannock Medical Society

Is the title of the Society organized in Fredericksburg, Va., during October, with the following officers for the ensuing year: *President*, Dr. S. W. Carmichael, of Fredericksburg, Va.; *Vice-President*, Dr. A. J. Chandler; *Recording Secretary and Treasurer*, Dr. P. S. Ray. The regular meetings are to be on the first Saturday of each month, and at each quarterly meeting some medical subjects shall be discussed. "Typho-Malarial Fever" is the subject appointed for discussion at the January, 1886, meeting. We congratulate the profession of Fredericksburg and vicinity upon this organization, and shall hope to have good reports from it from time to time.

The Transactions of the Medical Society of Virginia for 1885 will be a volume of considerably over 300 octavo pages, and will be issued during the present month to members. It is undoubtedly the most attractive volume ever issued by the Society.

Dr. Coggeshall's Library.

We call attention to the advertisement naming the books, etc., for sale by Mrs. Alice W. Coggeshall, belonging to her late husband. Letters or postals addressed to her or to the Editor of this journal will receive prompt attention.

Dr. Alonzo T. Keyt

Died at his home, in Cincinnati, Ohio, November 9th, 1885, of cardiac paralysis—age 58 years. He was the inventor of the compound sphygmograph, which bears his name. The post-mortem showed death to have been due to over-work.

Obituary Record

Dr. John Staige Davis.

At a meeting of the Faculty of the University of Virginia, held Saturday, October 17, 1885, the following preamble and resolutions were presented by Dr. Cabell, and unanimously adopted:

In the providence of God, the Faculty is called to mourn the departure from this life of an honoured and beloved member of its body, Dr. John Staige Davis, who, for forty years, had been connected with the institution as one of its corps of instructors.

Our lamented colleague may, indeed, be said to have been in a peculiar sense, a son of the University, having been a resident within its precincts almost his entire life. He was only five years old when his father was appointed professor of law, in July, 1830; and from that date, with only a short interval of two years, he remained in connection with the institution down to the hour of his lamented death on Friday, July 17th, 1885, in the 61st year of his age.

This sad event occurring during the absence of many members of this body in the collegiate vacation, the first occasion of their reassembling has been taken to pay a tribute of respect to his memory, and to place on record our appreciation of his worth and an expression of our sense of the great loss which his death has brought upon the University and upon the profession which he adorned, as well as upon ourselves, his associates and personal friends.

Enjoying unusual advantages of early scholastic training, under the direction of cultivated and devoted parents, aided by distinguished graduates of the University, and possessing extraordinary powers of intellectual acquisition, Dr. Davis took the degree of Master of Arts, the highest honor conferred by the University, before he had completed his sixteenth year; and one year later he gained the diploma of Doctor of Med-

icine. After a short interval, passed in prosecuting his studies elsewhere, he returned to the University, and received the successive appointments of Demonstrator of Anatomy, and Materia Medica, and finally of Professor of Anatomy, Lecturer on Anatomy, Materia Medica and Botany. With the exception of Botany, which, soon after the civil war was transferred to the newly established School of Agriculture, Dr. Davis held the same professorship from the date of his original appointment, in 1856, until his lamented death.

The glowing tributes paid to his memory in contemporary notices of his death, in the Medical, Religious and Secular journals of this and several other States of the Union, abundantly attest the honourable reputation he had won, and the lofty estimate placed upon his character and endowments wherever his name was known. The achievements of his professional career had fully realized the promise of his precocious childhood and of his brilliant University record.

As a lecturer, he had few equals and no superior. As a practising physician, he was not only fully abreast of the latest advances in the Medical Sciences, but was also skilful and judicious in their practical application. Assiduous in his ministrations and warmly sympathizing with the sick and suffering, he won, in an unusual degree, the confidence and grateful affection of his numerous patients.

In the relations of private life he was true and just in all his dealings, faithful to his friends, and habitually punctilious in dispensing the courtesies which beautify social intercourse among men. To these endearing qualities of earthly distinction he added the crowning grace of an earnest Christian faith.

1. *Resolved, therefore:* That this preamble, with the accompanying resolutions, be signed by the Chairman and Secretary of the Faculty, and be recorded in the Minutes.

2. That a copy of the same be communicated by the Secretary to Mrs. Davis, with an assurance of our sincere and profound sympathy with her and the rest of the family of our lamented associate.

3. That a copy be also forwarded for publication to each of the newspapers published in Charlottesville and in Richmond.

J. F. HARRISON, M. D.,
Chairman of the Faculty.

Wm. A. Winston,
Secretary.

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RICHMOND, JANUARY, 1886.

Original Communications.

ART. I.—**Operation for Vesico-Vaginal Fistula without the Use of the Catheter in the After-Treatment.** By HUGH M. TAYLOR, M. D., Member Virginia State Board of Medical Examiners; Visiting Surgeon St. Luke's Hospital, etc., Richmond, Va.

Before the lamented Sims contributed so much to perfect the operation for vesico-vaginal fistula, the use of the catheter, immediately after the occurrence of the fistula, was thought by many to be the only means at all likely to bring about a cure. Operative interference was then rarely successful, and a new era in gynæcological surgery was inaugurated when the intellect and perseverance of this great man furnished his well known details for this operation, and his sigmoid self-retaining catheter has been looked upon as not one of the least of the many advances for which the world will ever owe him a debt of gratitude.

Professor Simon, of Heidelburg, has for some time contended that too much stress has been laid upon the use of all catheters after this operation, and also that the advantages of the metallic sutures and the necessity of absolute rest have been overestimated. No little wonder has been occasioned by his uniform success, and yet he has been hon-

ored with no little criticism because of his supposed slowness in adopting advanced views.

In May, 1883, Dr. Goodell reported to the Obstetrical Society of Philadelphia three successful cases, in which, for special reasons, the catheter was not used. In his remarks, he expressed the opinion that there were many cases in which we could with advantage dispense with the use of the catheter. He was not prepared, however, to give it up altogether; he had accomplished too much good with it, and preferred the Goodman self-retaining catheter to all others.

A case has recently occurred in our practice which leads us to think favorably of the views held by Professor Simon, and partially conceded by Professor Goodell, in regard to the use of the catheter, and as far as one case is instructive, shows that the catheter may occasionally be dispensed with, in large, as well as in small fistulæ.

The patient we refer to had had a fistula for twenty years, dating from her last confinement, which was instrumental in character. An examination showed that great destruction of tissue had resulted. The neck of the uterus looked as if it had been amputated close up to its vaginal attachment. There had either been destruction of its tissue, or the vagina was closely adherent to it, and covered it up; and the cicatricial bands had drawn or turned what remained of the os through the fistula into the bladder. It was only by fishing for it in the bladder that the exact location of the os could be ascertained. The adhesions were old and strong, and no reasonable amount of stretching served to bring the cervix back into the vagina, and we did not think it probable that frequently repeated stretchings would bring about the result.

The fistula was as large as a silver dollar, and the only way we could get tissue enough together to close the opening was by attaching the lower border of the fistula to the remains of the posterior cervical lip, or, more correctly speaking, to the mucous membrane of the vagina covering it. The tissues were so changed and blended at that point that it was hard to tell one from the other. In doing this operation, the os was enclosed in the bladder, necessitating menstruation through that organ. Goodell and Agnew both

affirm, in cases in which they have been obliged to pursue this plan, that no serious consequences resulted.

What made the operation much easier than it may appear, was that the vagina was short and very capacious, and the cervix pulled down low by the adhesions; this rendered it easy to bring the border of the fistula and the cervix in apposition. A large surface was denuded, and eight or ten sutures were necessary to bring it together.

A piece of perforated rubber tubing, such as we had used successfully before, and seen used in a number of cases, was introduced as a catheter. For the first twelve hours it did its work well, and the bladder did not rebel against its presence. After that time, however, violent tenesmus came on, lasting several minutes at a time, or, in fact, until the catheter was expelled. Several times it was re introduced, but quickly driven out again. At last, as a matter of necessity, we were obliged to leave it out, and allow the patient to pass her water, thinking this a lesser evil of two. We were under the impression that the catheter was the cause of the trouble, and hoped for its cessation as soon as we removed it. Our hopes in this respect, however, were not altogether fulfilled; for several days, the bladder did not quiet down. Every twenty or thirty minutes the tenesmus would return, and last until a small quantity of urine was voided; and so frequent was the desire, that the patient kept the bed-pan under her all the time, and it was found impossible to keep her quiet. The straining was more like the second stage labor pains, and looked very much as if the bladder was trying to expel the neck of uterus.

Frequently repeated doses of morphine and belladonna controlled the tenesmus to some extent; and finally, by the time the stitches were taken out, on the twelfth day, the desire returned only about every two hours, and was attended with but little pain and straining. Much to our surprise, the vagina remained perfectly dry throughout, and the union was found to be complete.

During all of this disturbance, the urine remained free of mucus and phosphatic deposit. How much of this was due to the absence of the catheter, and how much to the free ad-

ministration of lemonade, we are unable to say; but from the confidence we have in lemonade in limiting phosphatic deposit, we are inclined to assign some effect to both.

When the patient returned home, the bladder was becoming more and more tolerant of the presence of urine, and perhaps we should say the neck of the uterus. We have since heard that her improvement is continuous.

All conversant with the subject, recall the time and ingenuity that has been devoted to devising self-retaining catheters for use after the operation for vesico-vaginal fistula, and no detail in its after-treatment has been thought more important than that of keeping the bladder absolutely quiet and emptied of urine. It was held that any urine allowed to remain in the bladder would percolate between the stitches, and destroy the chance of union. This danger is thought by many to be the most serious of all contingencies.

Sims' sigmoid catheter is looked upon by many as a useful and ingenious instrument. Goodman's self-retaining catheter is of more recent introduction, and is perhaps of greater popularity. Many are still contented to use a simple rubber tube, perforated; and many contrivances have been devised for fastening such tubes securely in the bladder. Ten years ago we spent much time in devising such means, and were no little concerned lest they should not prove adequate, and the operation, in consequence, result in failure. We shall not forget our relief when we found, under ordinary circumstances, that these tubes would remain in the bladder without the tapes, etc., and their elasticity made them sigmoid, as much so as any others—self-retaining.

We think, however, it is very generally conceded that any catheter, be it Sims', Goodman's, or the rubber tube, if worn in the bladder for any length of time, will act as an irritant, and give rise to the presence of mucus, phosphatic deposit, and cystitis. The bladder, perhaps, has not been called upon to tolerate even the presence of urine for many years, and we think it hardly fair to suppose that it will, without rebellion, tolerate the presence of any form of catheter. After the fistula is cured, it takes time to educate a bladder to retain the urine for any length of time, showing how intole-

rant it is. It is also fair to suppose that this education will proceed much faster if the additional irritation incident to the use of the catheter has not to be contended with.

The presence of the catheter is also said to excite more spasmodic action of the vesical sphincter, and thereby does more harm, than the occasional vesical contraction necessary to empty the bladder. On the other hand, it is claimed in long standing and large fistulæ, that the vesical fibres at the neck of the bladder, from long non-use, have lost in a great measure their tone and power of contracting, and that they are consequently very tolerant of the presence of the catheter. We are very much inclined to doubt this last conclusion. As mentioned in the above report, the catheter was violently driven out by fibres that had not been used for twenty years, and to our anxious mind they certainly seemed to have lost none of their contractile power.

When the urine is passed, *per vias naturales*, no blood-clots are left to decompose; no mucus is formed, and no cystitis results. Our experience teaches that the greatest suffering experienced after this operation is incident to the use of the catheter, and the necessity of remaining perfectly still for such a long time. If the catheter can be dispensed with, and the patient allowed to move about in bed, the after-treatment is certainly very much simplified, and the comfort of the patient a hundredfold promoted.

"Lænnec told one of his friends that he discovered the principle of auscultation thus: One day, in the court of the Louvre at Paris, he noticed children amusing themselves by holding a cylindrical piece of wood to the ear, and scratching with a pin the farther end. Thus they heard a louder noise than the pin usually produces. At his next visit to his patients in the Hospital Necker, he made a hollow cylinder out of a roll of paper, and applied it over the heart of a patient. This was the first stethoscope. After a time, he used one made from cedar-wood. In 1819 he published his treatise on Mediate Auscultation."

ART. II.—**Strabismus—Its Causes and How Remedied.*** By F. C. RILEY, M. D., New York.

Strabismus, or cross-eye, has, doubtless, been coincident with civilization, notwithstanding the fact that its physiology has been until recently but incompletely and partially understood.

Previous to 1830, although the subject had attracted considerable attention, the various causes and symptoms attending it were but imperfectly interpreted. Since then, however, and especially within the past twenty years is it that the various optico-physiological bearings of the anomaly have received the scientific elucidation that has brought the subject before the profession and laity in such a manner that for all future time the distressing condition known as "cross-eye" shall be amenable to proper treatment.

Many cases can, with our present knowledge of the subject, be completely obviated without the necessity of the slightest operative interference, which, had such previously existed, would have saved many individuals life-long annoyance and disfigurement. This fact alone is of great importance, as many persons of a nervous temperament are willing to suffer indescribable annoyance rather than submit to an operation, however slight, for the removal of such deformity.

Squint, or cross-eye, the generally popular term, is used to designate a converging strabismus—that is, the visual axes of the eyes cross each other at a point somewhere between the observer and the object looked at. As the term *visual axis* will recur, it may be well to define it here. If a person holds an object, say a pin, in front of him, with his attention directed to the head of the pin, a line drawn from that point to the macula lutea (a point on the retina where is situated the most sensitive visual appreciation), will represent the visual axis. Furthermore, it will be seen that as both eyes participate simultaneously in the visual act, and to the same degree in health, there must be two visual axes, and these axes must diverge from the object to an equal degree, provided the ocular muscles act harmoniously. If,

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however, these axes cross each other somewhere between the object and the eyes, it is evident that the visual axis of but one eye can be traced to the pin-head (the eye that retains the same position as in health), and the image of the object falls upon the retina at the macula lutea in this eye only. A line prolonged from the object to the retina of the other eye would fall upon it at a point to the inside of the macula.

Conversely, a line drawn from the macula lutea of this eye would not intersect the visual axis of its fellow eye at the point where the object is situated, but at a point between the observer and the object. A line drawn from the object to the retina of the deviating eye will fall upon a part of the retina to the inner side of the macula, if the squint be of the convergent order; to the outside of the macula, if it be divergent.

When an image of an object is formed upon the retina to one side of the macula, or principal seat of vision, it excites a different set of terminal filaments of the optic nerve to action. These filaments convey the impression to a different group of cerebral cells than those terminating at the macula, and we have, consequently, two sets of nerves, one in either eye, receiving and transmitting impressions to two cerebral centres; and as a result of this double excitation, we obtain two distinct images referred to two distinct localities. The eye upon whose macula the image of an object is formed transmits its image to the brain, and, being projected from the cerebrum, the object is located as existing in its proper situation.

With the squinting eye, however, the effect is entirely different. Impressions being received upon a part of the retina to the inside of the macula, the object, in consequence, appears to be to one side of where it really is—to the side of the squinting eye if the visual axes are crossed—homonymous diplopia; to the opposite side if they are diverged—crossed diplopia. This receiving of an object by each eye at a different angle, or with the visual axes forming unequal angles with a perpendicular let fall from the object to the plane of the face, causes diplopia or double images.

Noting the conditions necessary to produce double sight,

and recognizing convergent strabismus as the more common, an examination as to its causes and consequences is of importance.

Convergent strabismus is produced by paralysis of an external rectus muscle, which, by its non-activity, allows its *antagonistic* muscle to act and draw the eye inwards. The causes of paralysis affecting the ocular muscles need not be dwelt upon here. Suffice it to state that various lesions of the brain and nervous system that interfere with the physiological action of the nerve supply to the ocular muscles will result in their paralysis the same as if occurring to any other muscle or group of muscles. Convergent strabismus is also produced by errors of refraction—this cause being pre-eminently preponderant, and worthy of special consideration.

The refractive anomalies that militate against equilibrity of the muscular forces are of two kinds: hypermetropia and myopia. Hypermetropia, however, is the most frequent factor in the production of convergent strabismus. In order to understand this condition it is necessary to become familiar with the optic-physiology of the anomaly, which may be briefly summarized as follows:

Hypermetropia is an optically defective condition in which parallel rays of light (which are always dealt with in viewing objects at a distance of twenty feet and over), when the eye is in a state of rest, or unaccommodated, are focussed at a point *behind* the retina; whereas, in an eye optically perfect, under similar conditions, such rays would be focussed *upon* the retina.

Owing to the fact that in the hypermetropic condition the image is formed posterior to the retina, a blurred outline only of the object is perceived; and to overcome this indistinctness the accommodation is brought into use, which, by increasing the power of the refracting media, causes the formation of the image at a point coincident with the retina. A sufficient amount of accommodative power is, when possible, exercised in an endeavor to neutralize the optical defect—the effort being but relatively successful according to the degree of the hypermetropia, the age and general sys-

temic condition of the individual. In the viewing of near objects, from which none but divergent rays of light impinge upon the eye, the foregoing conditions are correspondingly augmented, and the image is less distinct according to the proximity of the object.

If an optically normal eye can see distant objects without recourse to any accommodative power (as is the case) and the hypermetropic eye, to gain the same amount of vision, has to exercise a portion of such power, it is clear that the latter can exert but the remainder of its accommodation for near vision. By using a portion of the accommodation, the eyes coincidently converge, and the point of convergence reaching a greater degree than is necessary to "fix" on the object, vision in both eyes, at one and the same time, becomes impossible.

A convergent strabismus may also be produced by a spasmodic contraction of one of the internal recti muscles, which, by preventing the requisite amount of lateral movement of the eye ball necessary to maintain double fixation at varying distances, precludes the possibility of muscular equilibrity.

There is another optical condition, the reverse of the former, which may produce a convergent strabismus. This is termed *myopia*, or near-sightedness. A convergent squint, dependent for its cause upon myopia, manifests itself in comparatively slight degrees of near-sightedness, and as follows: The myopic individual, taxing the eyes unduly by close application, calls upon the internal recti muscles for prolonged and excessive action in producing the amount of convergence necessary for binocular vision, and, in consequence of this hyper-stimulation, a contraction of these muscles ensues, which the weaker external recti muscles are unable to overcome, and a convergent strabismus is found to exist when distant objects are under observation.

With the higher degrees of myopia this cannot occur, because the requisite convergence for binocular vision is more than can be maintained owing to the proximity to the eyes at which the object must be held.

Until quite recently, it was customary to regard all cases of cross-eye as depending upon faulty action of the muscular

system, and the muscles were, in consequence, most vigorously assailed—the optico-physiological bearings of the subject being neither understood nor considered. As a result of ignoring this important and scientific factor in the production of strabismus, many a case that was operated upon with apparent immediate success was found, at a later day, to have been subjected to a still greater annoyance, and one, too, which was much more difficult to relieve.

By a careful study of physiological optics, and a judicious application of the same in every instance of cross-eye, the ophthalmologist of to-day is able to decide with a great degree of nicety the advisability of operative interference, which, however, should not be undertaken until all other means at hand have been found inadequate for its relief.

As convergent strabismus, or cross-eye, has been found to depend, in many instances, upon an optical defect—to overcome this we naturally turn to optical appliances for its relief. Such optical appliances consist of lenses that so alter the direction of rays of light transversing them as to cause the formation of the image of an object from which they emanate to fall upon the retina, and under the same conditions as exist in optically perfect eyes.

The importance of enabling the hypermetropic individual to gain distinct binocular vision cannot be overestimated. By a persistent disregard of the evils of squinting, the eye so affected may suffer irremediable injury. Originally, the affected eye may have possessed (and generally does) an equal amount of acuity of perception as its fellow. Disuse during a period of unrelieved strabismus, extending through childhood, and youth perhaps, may result in the loss of such acuity which may never be regained.

An accident to the good eye which renders *it* sightless under such circumstances, entails nearly, if not quite, total blindness. Such a possibility alone should have sufficient weight to establish in the mind of every one suffering with cross-eye the duty they owe to themselves to have the evil remedied. The attending annoyances of strabismus, combined with the unsightly appearance it entails, appeals—and strongly—to the practical as well as the æsthetic nature for

rectification. In an effort to overcome a strabismus, it becomes necessary to *first* correct the optical fault existing in each case—thus converting the eyes into an emmetropic or optically perfect condition. Provided such a procedure is of itself insufficient to completely obviate the anomaly, a subsequent operation, such as a division of the tendon of the offending muscle, can be resorted to.

The prognosis in a given case will depend upon the age of the patient, and the kind and degree of the refractive error; the length of time the strabismus has existed also has to be taken into account. As a rule, the older the patient, the more likelihood there is that the squinting eye has already become amblyopic, owing to disuse—which condition is not only unfavorable so far as sight in this eye is concerned, but the loss of visual perception, if it has occurred, militates against such an eye responding to the stimulus of light, and thereby adjusting its position so as to participate in binocular vision, for a time at least.

Strabismus occurring in children can ordinarily be more satisfactorily and easily remedied without operative interference than when existing in adults. Probably all cases of hypermetropia, could suitable glasses have been adjusted at a sufficiently early age, and worn constantly, would fail to develop into a condition of cross-eye, as the anomaly could not, under such circumstances, produce the necessary convergence of the visual axes to occasion such result. In the case of very young children, however, concentration of vision is comparatively unusual, and the latent hypermetropia does not manifest itself until such time in life as that at which their studies demand more assiduous labor. Then it is that prolonged and diligent use, necessitated by study, taxes their accommodative power, and what was heretofore a latent optical deficiency, becomes a manifest, and at the same time, perhaps, a painful annoyance.

As has been demonstrated, strabismus depends in a great measure upon optical defects; and it is equally demonstrable that its relief is to be found in the proper application of optical appliances. That untold benefit has accrued to innumerable patients suffering with hypermetropia and strabis-

mus, during more recent years, by the use of glasses will hardly be denied by any. Not only is such benefit advantageous on account of the temporary abatement of the painful annoyance induced by the refractive error (hypermetropia), but it is of inestimable value as regards the future integrity of the organ.

The importance of sight in these days of advanced mental culture and universal educational activity can scarcely be overestimated, and its care and preservation certainly demand, and should receive, the best efforts of all concerned.

105 *Madison Ave.*

ART. III.—**Therapeutics of Oil of Sassafras—especially for Neuralgia.** By THOMAS J. MILLER, M. D., Roanoke, Va.

I have anxiously waited for two years, hoping to see from the pen of a more competent writer, and from one of a wider range of experience, a just elevation of sassafras oil to a higher rank in the Pharmacopœia of the United States than it has so far received; for every author, from the days of Cox to Dunglison, and from him to the present period, has passed it over with but a slight notice, placing it on a line with the oils of aromatic plants, than which nothing is more unworthy and untrue.

Since the late Civil War, for nine or ten years, a considerable activity has been going on in various parts of Virginia in distilling sassafras oil. I am aware of its increased demand for flavoring confections and the great variety of sweet meats; but of this I have nothing to say, except that it possesses a strong and agreeable aroma.

As a medicine, it has gained quite a reputation among the farmers and hostlers as an external application in many diseases of horses and cattle, accompanied with swelling and pain; and has been used to some extent in anointing rheumatic limbs of persons, either with the oil alone, or in the form of a liniment, though I have never seen it exhibited by a physician, either internally, or any other way.

After so long a period of vain expectation, as no one has ventured to say anything in its behalf, I cannot refrain any longer to express some opinions on the subject, however crude and unpolished they may be, derived from my own personal experience.

My attention was first called to it on being sent for to see a lady—Mrs. K.—in Strasburg, Va., who had been suffering severely for several weeks with pain in the chest, with uncontrollable cough. Hearing of its efficacy in arresting local pains, as an external application, without the advice of any one, she poured a tablespoonful of the oil into a tumbler, adding three or four tablespoonfuls of water, and drank it, with the belief that if it did good externally applied, it could do no harm to swallow a tablespoonful. This happened in the evening. The same night, about 10 o'clock, I was sent for to see her. I found her sitting in a chair, surrounded by her husband and children, who seemed amazed at her excited behaviour. She was laughing and talking incessantly, and appeared, as it were, overflowing with the most benevolent and tender sentiments. On examining her pulse, I found it with diminished volume, and considerably reduced in frequency, with the pupils of her eyes quite distended. I sat by her for some time, conversing with her, and at length left her apparently enjoying every felicity that could be afforded a human being by anything on earth.

The next morning I called to see her, and found her still cheerful and happy, though not in transports, with pupils yet a little expanded, the pulse more voluminous, and approximating its usual speed. She had a perfect recollection of all that passed the night before, and said she did not believe she could have been happier in heaven. She presented no languor, no nausea of stomach, and, above all, was entirely without pain or cough, and she declared herself as being perfectly well; and so it turned out, that she was well from that time, and remained so as long as the family remained in that part of the country.

The next opportunity offered me to witness its effects was in the case of a mule, that seemed, from its extreme distress and restlessness, to be in a dying condition, and the lookers-

on generally thought so; and, as usual, there were many prescriptions tendered. But the owner of the animal came for me in great excitement, fearful of losing his mule, which would greatly embarrass his pursuits, and asked if I could not advise him what to do for the animal. Believing it to be a case of intense cramp-colic, I told him to give it an ounce of sassafras oil in half a pint of water, which he did. In five minutes the beast lay quietly, and seemed to be free from pain, and soon after jumped up and capered around the yard as though nothing had been the matter, and was from that time quite as well as usual.

Not long after this, an estimable young man came to me with his face tied up, and suffering, as he said, excruciating pain, as he had been for several weeks, in spite of all the treatment given him. Satisfied that it was neuralgia of the sensitive nerves of the one side of the face, which had resisted quinine and morphine, and the various counter-irritants used in his case, I told him to saturate a piece of flannel with the oil of sassafras, and rub the affected side of the face briskly until the skin was reddened by the friction, and take a teaspoonful in several tablespoonfuls of water, and swallow it. The next time I saw him he declared that within ten minutes after taking the oil of sassafras he was entirely well, and remained so. He spoke of its exhilarating and cheerful influence upon him, such as he had never experienced in taking other medicine.

The next case was that of my oldest daughter, who was attacked in the same manner, and with intolerable severity. It was the first and the last spell she ever had. She asked me to give her something to give her ease, if possible. I told her to rub the affected part well with sassafras oil, and take a teaspoonful in two tablespoonfuls of water. Some time in the night a message was sent to my chamber to visit my daughter. When I entered her room, I found her sitting up in a chair, talking with the greatest correctness—the thread of discourse being now and then interrupted by hearty outbursts of laughter. I sat by her side for some time, enjoying her felicity; and seeing there was no danger in her case, I left her for the night; for instead of suffering

pain as she had before taking the medicine, she was enjoying the greatest imaginable happiness. In the morning she came to the breakfast-table in good cheer—quite well, and free from anything like depression, or any of those sequences usual upon the action of highly excitant medicines.

For some years afterwards, I pursued this course of treatment in every appropriate case that presented itself, and can speak of it as highly worthy the attention of the profession.

I am fully persuaded that too much importance has been attached to exotics to the neglect of the growths of our own country, many of which (in their respective classes) abound in equal, if not superior medicinal qualities. The liriodendron, cornus Florida, hippocastanum, eupatorium perfoliatum (of the tonics), should more frequently be used, instead of so much quinine; for in deeply malarious districts it is often difficult to determine whether the disease or the treatment has conferred upon the patient the greatest evils. But in the practice of medicine, as in some of the arts and manufactures, too much stress is laid upon them because they are foreign; and the value seems to be increased more with the distance from which they are brought than that they have any superior merit to the productions indigenous to our own country and the labor of our own countrymen.

There can be no doubt that a concentrated tea of sassafras induces cheerfulness, pleasantry, and free conversation; and I wonder that it has not been used at social parties, and by students and literary men who burn the midnight lamp, to give new vigor to their languor, and to revive the vigilance of their pursuits.

The Tartars of Koreki of the higher ranks use the Siberian mushroom, served out in silver dippers, to the guests at social parties given to ladies and gentlemen, which soon removes all diffidence, and elates both sexes to a delightful intoxication, and after a few repetitions of the broth (for it is in this form that it is used), they laugh and talk double entendre with a freedom that often leaps the bounds of decorum.

The effects of tea of sassafras, on such occasions, resembles the effects of mushrooms from Siberia, as claret wine

and French brandy, both acting in the same direction, but inducing different degrees of excitement.

Now, the sassafras tree or shrub, is agreeably aromatic, and is common to both North and South America, and for this reason, perhaps, it is not strange that so little attention has been given to it as a medicinal agent by the profession. But the same has been the case with many other productions, both vegetable and animal; and, in truth, many owe their importance more to accident and discovery than to scientific research. Such was the case with cinchona, and such with the antidote for arsenic, which, up to 1833, had been treated by mucilages; and Orfila himself, who treated poisons of this kind in the same way, acknowledges that about three-fourths of the cases died. In the year referred to, I think, in a case of poisoning by arsenic, occurring in the city of Paris, a druggist was applied to for treatment. He, knowing that there was no established antidote, sent a new preparation of iron—the hydrate of the protoxide, as it could do no harm. The patient, who had all the alarming symptoms of poisoning already developed in his case, soon became better after taking the prescription, and recovered. The case was reported, and a commission of medical men was appointed to conduct a series of experiments upon dogs, which showed such uniform evidence of its efficacy that it is now everywhere acknowledged as the most certain antidote in such cases that is known.

I should be pleased to have this subject referred in the same manner, so as to arrive at safe and certain conclusions. It is very important to determine the maximum and minimum doses, and the frequency of repetitions in a given time, according to age and intensity of disease, as well as to guard the purity of the oil; for the effects upon the patient must vary in proportion to the quality and quantity. Sometimes it will be found adulterated, and at others the bark may have been injured by neglect, or improper exposure, in large bulks, in damp places, rendering it mouldy or rotten. Hence, unfair judgment may be passed upon its action, and be condemned by the experimenter as worthless, when in fact its failure was due to other causes.

In giving sassafas oil a place in the materia medica, I would class it with the anæsthetics, as chloroform, and exhilarating gas, though not as violent and evanescent as the latter, while yet free from those unpleasant effects that frequently result from it. I am not prepared to say in what quantities it may be given with safety, as my opportunities in a country practice have been comparatively limited, and therefore I am particularly anxious of introducing it to the profession. I have never given it in larger doses than a teaspoonful, and sometimes I have repeated it in two hours, except in the first case as mentioned above, when a tablespoonful was taken.

I am satisfied it may be given with more safety than the veratrum viridis, and in the same diseases. In despondent, hysterical women, I have no doubt it would have a charming effect; and in fevers, and other cases of sanguineous engorgement, or of cerebral tendencies. I would suggest that it might be a most eligible mode, whenever convenient, of giving it in a glass of soda-water.

From my own experience, I cannot say what effects a continuance of the tea must produce upon the system, or what would be the result of the habit of using the oil as a beverage. These questions I leave to those who have better opportunities, and whose enthusiasm in their profession, with the blessing of youth, with an earnest desire to investigate important truths for the relief of suffering humanity, will lead them to conduct every variety of prudent inquiry to determine the true value of the subject I have presented, however imperfectly it has been done.*

*A casual examination of a number of text-books on materia medica and therapeutics by the Editor shows no such properties attributed to sassafras oil as are ascribed by our author. But in an incidental conversation with an excellent country practitioner, to whom we mentioned the outline of Dr. Miller's paper, he informs us that many country people are familiar with the remedy for the class of cases indicated by Dr. Miller. Such a favorable report regarding a familiar article calls for further investigation, and we trust our readers will let us hear from them on the subject.

Clinical Reports.

A Case of Whitlow, with Prodromic Symptoms of Tetanus—Recovery. By THOMAS J. RIDDELL, M. D., Fellow Medical Society Virginia, etc., Richmond, Va.

On the 8th of December, 1885, about 7 o'clock P. M., Mr. L., in company with his wife, came to my office to consult me concerning his wife's right thumb. She had been suffering some pain for several days, and had rested scarcely any for three nights. She informed me that nearly two weeks ago, in closing her trunk, the tip of her thumb was caught under the lid and bruised, producing a small blood-blister on its end, and that she had experienced no pain from it until the last two or three days. Painting with iodine and the application of poultices seemed to have given her no relief; it grew worse, and the pain became agonizing.

Upon examination, I found the pulp of the thumb a little tumefied, acutely sensitive to the least touch, and the palmar skin very tense. I also observed that every few minutes a jerking or spasmodic contraction about the arm and right side came on, with slight contortion of the muscles of the face, which I regarded as clonic spasms. My diagnosis was whitlow, with prodromic symptoms of tetanus, fast developing. I informed her husband what I thought of the case, and that a free incision was absolutely necessary. After some hesitation on the part of the lady, I made a free opening, and a little bloody pus escaped from the wound. Much nervous excitation followed; however, after the administration of a dose of caffeine and bromide potassium, she soon expressed herself as feeling much relieved.

This lady was quite young—only 17 years of age—had been married a few months, and was in a delicate condition. As to her prior physical status I knew nothing; consequently I only prescribed small doses of potassium bromide and morphine combined, to be repeated every hour or two if required, warm poultices with laudanum and turpentine on them, to be applied every few hours, to the thumb; an aperient was also ordered, and she was told to go to her chamber and keep perfectly quiet in bed, free from all excitement.

I expected to see this lady the next day, but her husband failed to inform me of her condition, she having rested so well that night; until late next morning, he thought it unnecessary to call me.

However, the following night she grew worse; spasms returned, and she complained of pain about the jaws and neck. The above mixture of bromide was at once resorted to, and given as directed; hot poultices were applied, the sides of her jaws and neck were well rubbed with camphor-liniment and spirits of turpentine, and flannel was bound around the neck.

December 10*th*.—Mr. J. came for me, and requested me to call and see his wife as soon as possible. I visited Mrs. J. at 10 o'clock P. M., and found her resting well, though she had spent a very restless night. Upon awakening her, I perceived at once that she was under the influence of morphine, and learned that she had had no spasms for an hour or more.

In conjunction with the bromide mixture, I ordered half-teaspoonful doses of the tincture of valerianate of ammonia, to be given every hour or two if necessary, and the following:

℞. Calomel..... ....gr. vj.
Pulv. rhei.....gr. iij.
Sodæ bicarb.....gr. viij.
M. Ft. chart. No. 1.

Sig.—Take at once, and a seidlitz powder next morning.

The room was to be kept moderately dark, and everything quiet about the premises. Beef-essence and milk were given at short intervals as nourishment, and wine if much prostration. I saw the patient at 9 P. M. She appeared rather restless. Only a few spasms had occurred since morning. I ordered medicines to be given at shorter intervals if required. No material change in treatment.

December 11*th*, 10:30 A. M.—Patient's condition more favorable; medicines acted well. She has had a few spasms since last night, and is disposed to take nourishment. Treatment continued.

December 12*th*, 2 P. M.—Patient steadily improving; spasms growing weaker. and at longer intervals. She is more cheerful, and takes her food well, and has had no return of spasms since my last visit. After giving her some general advice, I informed her that I would discontinue my visits, as I deemed further medical attendance unnecessary.

In contributing this important article to medical literature, I disclaim any intention of throwing additional light on the treatment or theories of this formidable malady. The true pathology of tetanus is obscure, and its treatment, consequently, to a great extent, must be empirical.

We know, from statistics, that a small per cent. of cases recover under almost any treatment. In the above case, early diagnosis and prompt treatment, in all probability, averted the development of this fearful disease; and as the case might be of some practical importance to the profession, I thought it would not be amiss to report it.

When Erichsen and other eminent men of the profession tell us that medicines have no curative effect in the acute form of this disease, though they may afford relief to the patient, we cannot help feeling our ability to do but little when called upon to treat a case of tetanus.

In the past few years, it has been my privilege to treat a few cases of traumatic tetanus. Both surgical and medical treatment were resorted to, but to no effect; they ended fatally. Consultations with the best medical talent, however, were had in every case.

Early recognition of symptoms and prompt treatment of this disease are very important. The removal of all external sources of irritation, while the patient is kept in a moderately dark room, perfectly quiet, and free from all excitement, will contribute no little to recovery from prodromic symptoms. The various anti-spasmodics, anodynes, narcotics, etc., should be given according to the nature of the case. Beef-essence, milk, etc., should be administered at short intervals, to sustain and support the powers of life.

Proceedings of Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, December 10th, 1885.—The President, J. C. Wilson, M. D., in the chair. W. E. Hughes, M. D. Recorder.

Tumor of Testicle—Removal—Recurrence in Abdomen.

Dr. G. E. deScheveinitz presented a tumor of the testicle. Eighteen months before the first evidence of enlargement of the testicle, the patient had contracted syphilis. This led to

a diagnosis of syphilitic disease of the testicle, but the steady progress of the enlargement, in spite of specific treatment, soon compelled a change of diagnosis, with a consequent removal of the organ. One month after this removal the patient died, with recurrence of the tumor in the abdomen. Microscopic examination of the growth showed a stroma of young spindle cells, interspersed with variously shaped collections of cells closely resembling cancer cell nests. The seminiferous tubules are normal, or their cells are in active proliferation, or have passed out into the surrounding tissues to help form the nests mentioned.

Dr. H. R. Wharton presented a specimen from a case of *Gelatiniform Arthritis of the Knee Joint.* The joint had been diseased for two years, and was excised by Dr. John Ashhurst, Jr. In addition to the usual signs of the disease, the specimen showed a circumscribed patch of caries in the external condyle of the femur.

Tracheotomy for Croup—Death—Causes of Dyspnœa.

Dr. Wharton also exhibited a larynx and trachea from a case of membranous croup, in which tracheotomy had been performed. The patient, a girl, æt. 4 years, had had croup for some days, when increasing dyspnœa necessitated tracheotomy. After a period of relief, she died suddenly. Post-mortem examination showed a complete membranous cylindrical cast of the larynx and trachea extending into the larger bronchi. There was also an ante-mortem heart clot. The exhibitor remarked, that the points of greatest interest to him were the great relief following the operation, although there was much membrane below the point of opening, showing that the dyspnœa was due, to a certain extent, to reflex laryngeal spasm, the extreme smallness of the trachea, the extensive deposit of membrane, and the fact that the tracheal tube might easily have been pushed between the membrane and the inner surface of the trachea.

Dr. Carl Seiler thought that in these cases of croup, as well as in cases of foreign body in the larynx, it was a reflex spasm, rather than the direct obstruction, that caused the dyspnœa. He had found that it is not inspiration that is interfered with, but expiration. This would lead to the conclusion that the interference is due to spasm. Now if it is principally spasm, intubation of the larynx might in some cases supplant tracheotomy—it might at least be tried before tracheotomy is resorted to.

Dr. Wharton thought that in cases of movable foreign

bodies, it was the expiration that was most interfered with, while in the case of an impacted foreign body, or in an exudation, it was the inspiration. This he had been accustomed to regard as a diagnostic point.

Misplaced Kidney.

Dr. J. B. Deaver presented a congenitally misplaced right kidney, taken from the body of a subject in the dissecting-room of the University of Pennsylvania. It was situated opposite the fourth lumbar vertebra, resting upon the aorta and common iliac arteries and veins. It derived its blood supply from the aorta and common iliac, by two arteries. The two veins emptied into the ascending vena cava and common iliac. The ureter sprang from the anterior surface and entered the bladder normally.

Supernumerary Fingers—Heredity Illustrated.

Dr. H. A. Hare presented a patient with an anomalous hand—a negro, æt. 45 years, who had a supernumerary little finger on each hand. Each finger has a nail, and is fairly well formed, but is apparently not connected with a metacarpal bone. He has nine children—first, a boy, has six fingers on each hand; second and third children had normal hands; the fourth and fifth children were girls, each having six fingers on each hand; the remaining children had normal hands. He knows nothing of his parents.

Dr. Wharton Sinkler had had a patient under observation some years before, who had a perfectly formed and useful supernumerary third finger, which was, he thought, connected with a metacarpal bone. He was one of four sons—three of whom had supernumerary fingers or toes, as also had his father and some of his paternal uncles. There were no deformed females in the family.

Dr. James Tyson recalled two instances of this anomaly—the first in a colored boy, whose father presented the same condition; the second was in an idiot with no family history of heredity.

Dr. deScheveinitz mentioned a case in which this anomaly had passed through two generations. He also referred to a fœtus, whose cystic degenerated kidneys he had presented to the Society, in which were present on each side, six fingers and six toes, in which dissection showed the digits to be supplied with supernumerary metacarpal or tarsal bones.

The President had seen several cases of this anomaly in which the supernumerary digit was a mere dermal appendage, situated at the outer side of the hand, near the base of

the little finger. Two of these instances had occurred in the same family.

Dr. B. A. Randall asked if supernumerary metacarpal or tarsal bones are often to be found in these cases—a point rather neglected in the previous discussion.

Dr. Wharton had seen a case in which there was a well-marked supernumerary metacarpal bone, in connection with a perfectly developed supernumerary finger between the middle and ring fingers.

Dr. H. F. Formad had seen a case in which there was no corresponding metacarpal bone, while in the child's grandfather, there was a well-developed supernumerary metacarpal bone. The intervening generation was normal.

Dr. W. E. Hughes said that these, like all other anomalies, were very frequently hereditary, and, again, like other anomalies, were much more common in the colored race. There were all varieties of these, from mere dermal appendages, such as are present in the case to-night, to perfect fingers attached to perfect supernumerary metacarpal bones. Between these were cases in which a perfect supernumerary finger was attached to a normal metacarpal bone by a joint separate from the joint of the normal finger. Very rarely there were supernumerary carpal or tarsal bones.

Dr. Hare said the metacarpal or tarsal bones were rare, that dermal appendages were quite common, and that bifid membranes held an intermediary position.

Dr. A. S. Roberts read notes on a case of *deformity of the forearm and hand, with an unusual history of hereditary congenital deformity.*

Brain of an Epileptic Imbecile.

Dr. F. T. Dercum presented the brain of an epileptic imbecile. The dura was somewhat thickened, but not adherent. On puncturing it, five ounces of cerebro-spinal fluid escaped. The pia was adherent in a few places. The ependyma was not densely injected and the velum interpositum thickened. The convolutions were, for the most part, small, and the sulci shallow. The frontal convolutions were little more than outlined, and on the right the island of Reil was freely exposed. On each side, the fissure of Rolando ran directly into the Sylvian. In the occipital lobes were the points of greatest interest. These lobes were remarkable for the smoothness of their surface. On the lateral surface only a shallow groove corresponded with the normal longitudinal occipital fissure. On the mesial surface, the calca-

rine fissure was short, and extended directly into the hippocampal; the posterior end bifurcated on the right, but was simple on the left. In the right hemisphere, the parieto-occipital curved forward and ran for a short distance parallel with the fissure of the corpus callosum, then abruptly turned upward, terminating upon the lateral surface. A comparatively well marked *file de passage* was present, but made an obtuse angle of 120° with the calcarine. On the left, the parieto-occipital made a right angle with the calcarine, and ran perpendicularly upward, to end in a bifurcation on the lateral surface. On this side a large superior *file de passage* was found. Microscopic examination of the paracerebral lobule showed the cells in the upper part of the cortex, though numerous, rounded or irregular; in the lower part the cells were comparatively few; pyramidal cells were the exception, and only one or two of the usual large cells were found. The walls of the vessels showed decided change. The reporter remarked that the brain could only suggest atavism in a remote degree, being essentially an arrest of development, which was most marked in the frontal and occipital regions. Further, the condition of the pia and the lateral ventricles, with the excess of cerebro-spinal fluid, point to a brain essentially diseased.

Dr. Formad presented the *Brain of an Imbecile.* As a young child, the patient had been normal, the imbecility coming on after a sun-stroke. The brain was markedly asymmetrical, the left cerebrum twice as large as the right, with an entire difference in the distribution of the convolutions. On the contrary, the right lobe of the cerebellum was twice the size of the left. The head was shaped to suit the brain.

Dr. Dercum said that from the fact of the brain fitting so well into the skull, it would seem as though the condition might have been congenital. Still, in view of the traumatism and the age at which the symptoms commenced, he thought the condition rather one of atrophy. Not only were the primary convolutions perfect, but also the secondary. If it had been congenital the secondary convolutions would most likely be absent and the primary poorly formed.

Dr. Formad also exhibited an *Anomalous Brain* from a boy æt. 9 years. He had been healthy and of fully average ability. Death resulted from an accident. There is an entire absence of falx cerebri, the two hemispheres being connected by a bridge of brain substance. There is nothing else abnormal.

Dr. Formad then continued his remarks on the *characteristic lesions of chronic alcoholism* and presented illustrative specimens.

Primary Sarcoma of Kidney in Child.

Dr. J. P. Shitmarks presented a primary sarcoma of the kidney occurring in a child five years old. There was absence of a history of heredity. Enlargement of the abdomen was noticed soon after a fall and progressed rapidly. The tumor, hard, rounded and painless, extended from the crest of the ilium to the margin of the ribs on the left, with nodules extending to the median line. Toward the end the lower extremities became œdematous, and the superficial abdominal veins enlarged. She died four months after the first symptoms. *Post-mortem.*—The left kidney was found enlarged to the size of a fœtal head, with a complete destruction of any normal structure. There were secondary deposits in the peritoneum, omentum, liver, spleen and right lung.

Dr. Formad said he had examined the growth and found it to be a congenital rhabdomyoma, which had undergone sarcomatous change. Primary renal sarcomata rarely give metastasis, and he accounted for the numerous secondary growths in this case by the fact that the sarcomatous change was secondary to the rhabo-myoma.

Pneumonia with Meningitis.

Dr. T. S. K. Morton presented specimens from a case of pneumonia with meningitis. The patient, when first seen, five days after the initial symptoms, was profoundly comatose and rigid, with finely contracted pupils and the physical signs of pneumonia. She died in a few hours with no change in the symptoms. The dura was in spots slightly adherent. Extending the whole length of the longitudinal sinus were firm, white clots. A small vein on the dura by the clot had ruptured and poured out about a drachm of blood. There was extensive suppurative lepto-meningitis with considerable effusion in the ventricles. The upper lobe of the right lung was in a state of advanced red hepatization.

Dr. J. H. Musser said that the extreme interest of this case arises from the association of apex pneumonia with meningitis without any lesion in the body, as ulcerative endocarditis, or any septic process to account for their concurrence. As is well known, in apex pneumonia cerebral symptoms are very prominent, being attributed to functional disturbance of the brain. At the present day there is no attention paid to

the active treatment of them. This case teaches the valuable lesson that we must learn to treat these symptoms more actively in many cases, or we may expect frequent disastrous results.

Dr. Tyson said that notwithstanding the absence in the history of any traumatism, he could not but think there might have been a blow on the head which was responsible for the pneumonia.

The President remarked the absence of any history of traumatism in the case by which the meningitis might have been caused, and brought into prominence the lesions of chronic alcoholism—a condition in itself strongly predisposing to meningitis. The cerebral symptoms appear to have been not only more intense but also different in kind from those met with in pneumonia, and particularly apex pneumonia. Though perhaps not more intense than is sometimes seen in the apex pneumonia of children, they were certainly different in character. The association of the two diseases—pneumonia and meningitis—he thought accidental rather than causal.

Meningocele.

Dr. C. M. Wilson presented a meningocele taken from a patient dying sixteen days after birth. The brothers and sisters were healthy, but the youngest had in the temporal region a nævus. The child died in convulsions. The tumor, which grew from the posterior fontanelle, was as large as an English walnut, was filled with cheesy matter, and its cavity could be reached from the interior and the cranium.

The Committee on Morbid Growths reported, (1) Dr. Dunn's specimen removed from the lumbar region of a cow, shows a combination of *mycoma with lipoma*; (2) Dr. Roberts' tumor removed from the theca of the extensor tendon of the middle finger shows the structure of a pure fibroma.

Card Specimens.—Dr. W. A. Edwards, head and neck of a tænia soleum; Dr. Morton, bony tumor projecting from right side of falx cerebri; Dr. J. M. Keeting, congenital cystic liver; Dr. R. J. Curtin, tricuspid insufficiency; Dr. J. S. Neff, chronic endo- and pericarditis, heart weighing fifty-six ounces; Dr. Tyson, acute pericarditis; Dr. Formad, acute pericarditis; heart with three ventricles; rhabdo-myoma of kidney; two cases of spina bifida; congenital diaphragmatic hernia; congenital occlusion of rectum.

BALTIMORE ACADEMY OF MEDICINE.

Stated meeting held December 1st, 1885. The President, Dr. J. J. Chisolm, in the chair.

Evisceration of the Eye-Ball by the New Method.

Dr. J. J. Chisolm related a case of evisceration of the eye-ball after the plan recently recommended. The operation consists in completely excising the cornea by means of a circular incision around its margin. The contents of the ball are to be entirely removed, leaving the sclerotic intact. The advantage claimed for the operation is that the socket tissues are not disturbed, neither is the muscular apparatus of the eye interfered with; besides, the stump left, after cicatrization, leaves an admirable seat on which to locate the artificial eye. The operation itself is a very simple one, and can be performed much more expeditiously than can complete enucleation; but convalescence is so very tedious, and at times gives rise to such painful and alarming symptoms, as occurred in this case, in future he will confine himself to the old plan of complete enucleation.

Dr. Chisolm said it was his usual custom to allow a patient to go about his affairs very soon after the operation—at the outside, twenty-four hours; but in the evisceration operation, even up to the fourth day, and later, if there was œdema and pain, he could not think of allowing the patient to be from under his observation. He had never had such an experience with the old method.

Dr. S. C. Chew wished to know if sufficient anæsthesia could be produced by the use of cocaine to enable one to perform this operation without painful sensations on the part of the patient.

Dr. Chisolm thought not.

Paralysis the Result of a Fall.

Dr. A. B. Arnold related a case which occurred at Bay View Asylum a year ago. It occurred in a woman five months pregnant. She fell from the second-story window, striking upon the bead; when picked up she was senseless, and remained so for three days. Among the consequences of the fall, abortion was brought on. At present she has paralysis of both lower extremities, complete anæsthesia of the right side; is deaf, and also blind, on this side. She evidently has some spinal trouble, as she complains of that sensation so common to these troubles, "as if a belt were being drawn about her waist;" also has some enfeeblement of the sphincters of bladder and rectum. In addition, there

is a peculiar nervous jerking about the head, which has continued for one year. Dr. Arnold thinks the lesion is located about the inferior third of the internal capsule, extending up and involving the the optic and auditory nerves at their point of crossing; and also he takes the nerves of sensation, which come off at this point, to be affected. He thinks the symptoms justify this conclusion. The pupils responded normally to light. She had never had any trouble previous to this fall.

Dr. Chisolm asked if any ophthalmoscopic examination had been made? He said he was prompted to ask this question by a case which recently came under his observation. It occurred in a man who had received a severe beating, and among the results, loss of vision began after about six weeks. He examined him, and found anæsthesia of the fifth nerve, the hearing involved, and several small retinal hæmorrhages around the point of entrance of optic nerve.

Case of Empyema.

Dr. S. C. Chew had been called in consultation to see a case which occurred in a patient who for several days past had suffered from severe dyspnœa. The night before he saw the patient, he had had copious expectoration of matter, the nature of which he could not describe, as it was not saved. This was followed by immediate relief from the difficulty of respiration.

Upon physical examination of the chest, the left pleura was found to be about two-thirds filled with fluid. Shortly after his visit, the patient suddenly died, with profuse vomiting of purulent matter, as well as the passage of quantities of it from the bowels. From such symptoms, he thinks it highly probable that perforation took place through the diaphragm into the stomach, and that the fluid was discharged in both directions, through the œsophagus and through the intestines. He had searched the literature on the subject, and he had found no case, terminating in this manner, recorded. Physical examination of the chest, made before the first expectoration of matter, showed the pleural cavity to be entirely filled with fluid. More recently he had seen a patient at the Baltimore Infirmary whose physiogomy was indicative of pulmonary trouble. Percussion over the right side of the chest gave decided resonance, both anteriorly and posteriorly. On auscultation on the same side there was pronounced hippocratic succussion. Shaking the patient while the ear was still on the chest, gave a sound

similar to that heard when one shakes a jug partly filled with water. No discomfort at all was noticed—neither pain nor dyspnœa. He thought the absence of dyspnœa could be explained on the ground that the air probably distended the pleura (and this compressed the lung) so gradually that this lung, as well as the healthy one, had sufficient time to accustom themselves to their abnormal relations. Whether perforation was due to ulceration outward through the pleura, from the wall of a cavity in the lung, or whether it was due to a loss of substance occasioned by a point of inflammation upon the visceral pleura, and thus perforation taking place in the reverse direction, he could not say, although symptoms sufficiently marked were present to point to either mode. In his opinion, surgical interference should be resorted to as soon as the condition of empyema is made out.

Dr. Arnold had seen a case of empyema in a child. It occurred on the right side, ulcerated through the diaphragm, and discharged its contents into abdominal cavity. The child died from shock. He considered it somewhat remarkable how rarely phthisical patients showed any signs of discomfort from interference with respiration, even though their lungs might be riddled with cavities.

Dr. Chew looked upon this as due to the slowness of the pathological process, thus enabling that portion of the lung which is healthy to increase its physiological activity. He also thought, in view of the fact that cavities so frequently form near the pleura, that it was singular that we so rarely found perforations from them.

Dr. Chisolm said serous sacs resisted perforation.

The Cocaine Habit.

Dr. J. C. Thomas said since he had been told that in some of our principal cities the cocaine habit was largely being acquired, he would like to ask if any member had ever seen a case of it; and if the report is true, did not the gentlemen think that the medical profession should take some steps to prevent the reckless prescription of this seductive drug?

Dr. Chisolm related two cases in which decided loquacity was produced by the introduction of cocaine into a cavity in a decayed tooth. In speaking of *cocaine tablets*, he referred to a condition, amounting almost to a slough, that was produced on the buccal surface of his own cheek from the application of one of these tablets to the gum, and allowing it to remain until dissolved. From this, he hardly considered them the thing to use in nasal catarrh.

AMERICAN PUBLIC HEALTH ASSOCIATION.

We condense this brief report from the *Sanitary Monitor*, for December, 1885, of this city:

The thirteenth annual session of the Association was called to order at 10 A. M., Tuesday, December 8th, 1885, in Washington, D. C., by the President, Dr. James C. Reeves, of Wheeling, W. Va., Dr. Ezra M. Hunt, of Trenton, N. J., Secretary.

In a lengthy paper on "*Forms of Tables for Vital Statistics*," Dr. J. S. Billings, of Washington, D. C., urged health officers to furnish full and accurate reports of prevailing sickness and deaths *weekly*, so as to avoid responsibility of concealment.

Dr. Henry B. Baker, of Lansing, Mich., spoke of the "*Relations of Rainfall and Water to Cholera.*" He presented tables which showed that rainfall and cholera bore a statistical relation, the mortality being greater in seasons of little rain, and *vice versa;* also that the mortality was greatly reduced upon the introduction in modern years of a good water supply. If a supply of good water had such effect as appeared by this comparison upon cholera in its home, in the East, sanitarians here could use the knowledge thus gained in their efforts to prevent the appearance of cholera.

"*The Virus of Hog Cholera*," by Dr. D. E. Salmon, D. V. S. During the present year the ravages of hog cholera have been unusually widespread and severe, costing the country nearly $30,000,000. The disposition of the millions of carcasses of hogs that have died from this disease is a matter which affects the health of our people. Sometimes the carcass is left to putrefy in the open air, to be preyed upon by carnivorous animals and birds; sometimes they are thrown into the ponds and streams which furnish drinking water to our cities; sometimes the lard is rendered from them. Only exceptionally are the carcasses buried. The study of virus is of peculiar interest at this time, because of its bearings upon the general subject of contagion.

The President announced the following to fill vacancies in the Advisory Council: Alabama, Dr. Jerome Cochran; Canada, Dr. Covernton; Indiana, Dr. Gatch; Iowa, Dr. A. W. Cantwell; Louisiana, Dr. Joseph Holt; Maine, Dr. F. H. Gerrish: Michgan, Dr. O. W. Wright; New Jersey, Dr. E. M. Hunt; U. S. Army, Dr. J. S. Billings; Virginia, Dr. J. F. Winn.

At night, the President delivered the Annual Address.

During *Wednesday morning's* session, Dr. P. H. Bryce, Sec-

retary of the Provincial Board of Health, Toronto, Canada, read a paper on "*Small-Pox in Canada, and the Methods of Dealing with It in the Different Provinces.*" He related the circumstances of the outbreak of the present year, stating that it was not until a prominent politician had died from the disease that the outside world, and Montreal herself, awoke to the situation. The number of deaths was about 3,100, or about one to every infected house. The epidemic was not confined to Montreal alone. Among the French, the system of sanitation was unable to grapple with the disease. Knowing this, the health authorities of Montreal provided the local Boards of Health with instructions, and did everything in their power to warn them of their danger. All goods, merchandise, and people passing in or out of the province, were strictly examined. The railways lent ready aid, and every car was examined, and all the railway officials vaccinated. Merchandise certificates were issued, which prevented the cancelling of a large number of orders. Passengers were asked if they came from Montreal, what street and number, and if it was found that they came from near an infected house, their baggage was taken and fumigated, and themselves quarantined for a time. In the Province of Quebec equal precautions were taken. The speaker thought it very creditable to Ontario that it had succeeded in establishing an internal quarantine, through which no case of disease had passed to the neighboring States. He thought that the unreasonable continuance of the quarantine at the Suspension Bridge should be removed.

Dr. Wm. H. Hingston, of Montreal, referred also to the dissemination of anti-vaccination views among the French people, which had done incalculable damage. The sentiment against vaccination, however, had now almost entirely disappeared. This was due first to the commercial people of the Province, who made it a rule that no one should be employed in a store, warehouse, or factory without a certificate of vaccination, and then to the American authorities, who declined to permit persons to cross the frontier without showing marks of recent vaccination. Referring to the death of 3,100 people, he said it was enormous, but it did not represent 3,000 houses of mourning. He had heard that in some of the United States one child required two or three houses. It was not so in Quebec. "The death rate was large, but our birth rate was enormous. There is no country in which the birth rate is so enormous." He spoke of the density of the French population, and said when the

small-pox entered a house it would take off five or six children under 7 years of age. So the number of deaths should be divided by six or seven to represent the number of afflicted households. The reports that the French people in Quebec were unclean was untrue. They were scrupulously clean, but they were crowded, and large families lived in small quarters.

Dr. A. N. Bell, of New York, said that one tithe of the energy expended in Montreal since the small-pox appeared there, if expended before, would have prevented a single case. He looked upon small-pox as a crime, and spoke most energetically, denouncing anti-vaccinists, and in favor of compulsory vaccination.

Dr. J. G. O'Connor, of Holyoke, Mass., said that compulsory vaccination put an end to the small-pox epidemic in his city twelve years ago in three weeks.

"*Impure Air and Unhealthy Occupations as Predisposing Causes of Consumption*" was the title of a paper read by Dr. C. W. Chancellor, Secretary of the Maryland State Board of Health. Statistics show that one-eighth of the deaths occurring in this country result from consumption. Salesmen in stores are more liable to lung diseases than others, because of their employment in rooms where the air is close and superheated. He referred also to the dangers surrounding operatives in factories, where the dust-laden air was vitiated. He contrasted the fearful mortality among steel grinders, flint-cutters, glass-polishers, and others, the deaths from consumption being from 40 to 60 per cent. The Doctor recommended the establishment of consumption hospitals in every city.

Dr. James, of Philadelphia, thought there ought to be a distinction between the disease due to chronic inflammation produced by stone dust, coal-dust, etc., and a real tubercular consumption caused by the introduction of tubercular matter. The real tubercular consumption, he believed, was either hereditary, or was caused by breathing the air over a consumptive patient. The great majority of cases reported as consumption were nothing more than the results of overwork and the breaking down of the system.

Dr. Bell, of New York, said there was a larger percentage of deaths from consumption in the District of Columbia than in New England. Was there any other population that furnished so many clerks shut up in close, dark rooms, pouring over books? Take this fact in connection with exposure to night air, and he thought it explained the figures. He was

convinced that at least 75 per cent. of consumption was due to exciting causes, and was not hereditary.

Dr. James thought it was probable a large number of people having a tendency to consumption came from other cities. He had been through most of the departments here, and he had never seen any offices so well constructed or so well arranged with a view to the health of the occupants.

Dr. J. M. Toner stated, in regard to the prevalence of pulmonary diseases in Washington, that it was due in a measure to the large number of colored people in the District, who, on account of their careless mode of living, without sufficient shelter and proper food, were predisposed to consumption; and further, that many of the deaths occurring here do not belong really to our population, as they occur among people already fatally affected, and only stop here on their way to a more southern and genial climate.

The Afternoon Session was taken up with the report of the Committee on State Boards of Health. Dr. Granville P. Conn, of Concord, N. H., stated that Maine, Kansas and Pennsylvania had completed the organization of their State Boards of Health since the last meeting.

During the *Evening Session* Dr. E. M. Hartwell, of Johns Hopkins University, read his paper on the "*German System of Physical Education.*" He sketched the development of "turning" in Germany, how physical training was obligatory, not only in the high schools, but in the lower or public schools, and was now obligatory in the schools for girls. The aim was not only to train the soldier, but to educate the pupil harmoniously. The school children were required to give two hours weekly to "turning." They begin the exercise at the age of six, and carry it on until they leave the schools to enter the university or the industrial schools.

Dr. O. W. Wright, of Detroit, Mich., read a paper on "*Experiences in Disinfecting Sewers.*" He gave an amusing account of his crusade against the sewer gases of his city. He used 300 pounds of copperas and three tons of burning brimstone with the good result of a marked decrease in diphtheria and scarlet fever. "However, the use of disinfectants affords only a temporary safeguard, and in case of a threatened epidemic, could never be safely considered an offset to the fearful danger arising from defective sewerage."

Dr. J. H. Raymond, of Brooklyn, cited some experiments in which chloride of lime had been found a successful disinfectant.

Third Day—Morning Session.—The usual routine business

being disposed of, Dr. John H. Ranch, Secretary State Board of Health, Illinois, proceeded to read a valuable paper on "*Maritime Quarantines from the mouth of the St. Lawrence to the Rio Grande.*" He described the wonderful improvements which had been made in the sanitary care of ports. Referring to the Virginia ports, all vessels are examined at the station in Hampton Roads by the quarantine officers. Thus far, there have been no cholera-infected vessels to inspect. The inspection maintained by the Marine Hospital Service during the summer months is an additional protection.

Dr. Joseph Holt, President of the Louisiana State Board of Health, next read an eloquent paper on "*Sanitary Protection of New Orleans, Municipal and Maritime.*" Already a plan was being prepared for the systematic and thorough sewerage of the city. Maritime sanitation had taken the place of quarantine along the coast. The theory of bacillic origination for the essential cause of diphtheria, consumption, small-pox, and yellow fever has passed from the realm of uncertainty into a crystalized fact. We are no longer fighting the devil and the devil's works, but a microscopic germ—a little leaven, which, if not immediately eradicated, leaveneth the whole lump. Yellow fever and cholera are due to living organisms, and it is to the destruction of these that our efforts are directed. We disinfect every ship coming from cholera and yellow fever regions, regardless of bills of health or the angry cry of trade-mongers. New Orleans has not grown as other American cities, because of the yellow fever. As to inoculation for yellow fever, it seems to have been proved that the germ can be inoculated in the body of an unacclimated person, and that a mild form of yellow fever will be produced thereby. The persons who have been thus inoculated have been enabled to pass through most virulent epidemics unscathed.

The Lomb Prizes Awarded.—These prizes, offered by Mr. Henry Lomb, of Rochester, N. Y., were awarded as first and second prizes—$500 and $200, respectively—on the four subjects named. The first subject was "Healthy Homes and Food for the Working Classes." None of the thirty-six essays fulfilled the terms of the announcement. The second prize was awarded to Victor C. Vaughan, of Ann Arbor, Mich. "The Sanitary Conditions and Necessities of School Houses and School Life." Of the twenty papers submitted, the Committee found none worthy of the first prize. The second prize was awarded to D. F. Lincoln, M. D, of Boston.

"Disinfection and Individual Prophylaxis against Infectious Diseases." The first prize was awarded to Dr. George M. Sternberg, of Johns Hopkins University, of Baltimore. The second prize was withheld. The fourth subject was "The Preventable Causes of Disease, Injury and Death in American Manufactories and Workshops, and the Best Means and Appliances for Preventing and Avoiding Them." The Committee thought no essay worthy of the first prize. The second prize was awarded to George H. Ireland, of Springfield, Mass.

Mr. Lomb was made a life member.

Disposal of the Dead.—Dr. John Morris, of Baltimore, presented the report, which was chiefly a digest of the literature on the subject for the current year. The general acceptance of the term theory had materially influenced public thought respecting cremation. Even those who did not favor cremation admit the necessity of reform in the present mode of disposing of the dead. Cremation was gaining ground in many countries in Europe. There were 4,380 dissected in the colleges of Paris yearly. The *debris* of these bodies was now incinerated by special order. Three hundred and ninety-six bodies were cremated in Europe during the past year. A bill had been introduced in the Spanish cortes allowing cremation. The dreadful scenes in Grenada during the cholera plague, when hundreds of bodies remained unburied for years, had undoubtedly influenced the Spanish authorities. Cremation was also advancing in Germany, where scientists claimed that cremation was a safeguard against the spread of infectious diseases. The subject was exciting marked interest also in Denmark, where sanitarians thought the bad effect of cemeteries upon the health of the people had been demonstrated. At a meeting in London, in April last, very effective arguments were advanced in favor of cremation. Four persons had been cremated this year in England. The agitation of this question in England had led to the formation of a company, which had purchased 2,000 acres of ground for cemetery purposes near London. The coffins are made of pulp or paper maché, which to all appearances is as solid and enduring as the ordinary coffin, but in reality speedily dissolves after interment. As to cremation in our own country, Dr. Morris said that the example of such a distinguished and enlightened man as Dr. Gross had no doubt had a marked effect upon public opinion.

It is generally admitted that this process should be adopted

in all great epidemics and after battles, but it would be wise to extend it to cases of zymotic diseases—such as cholera, small-pox, scarlet fever, and diphtheria. These poisons are preserved for years, and at certain times, under certain conditions, vent their destructive force on the human race.

Professor Kedzie, of Michigan, referred to a terrible outbreak of typhoid fever in the city of Grand Rapids, Mich., which was traced to an alley located on low ground near a cemetery, where the wells, he believed, were contaminated by seepage from the burying-ground.

Dr. Rohe had not yet had evidence that convinced him that any case of infectious disease had ever been transmitted by decomposing remains in a cemetery.

Dr. Felix Formento, of New Orleans, declared himself as in favor of cremation, especially in cases of epidemics or infectious diseases.

Dr. Allen, of Massachusetts, thought the only valid argument made against cremation was the fact that it might in some cases prevent the detection of crime.

Dr. Hibberd, of Indiana was not sure there was evidence that infectious diseases had been transmitted by cemeteries; yet he favored cremation, because it was a good way of disposing neatly and with dispatch of bodies which could be of no more use in the world.

Officers for Next Year:—President, Dr. Henry P. Walcott, of Cambridge, Mass.; Vice-Presidents, Drs. C. W. Coverton, of Canada, and G. B. Thornton, of Memphis, Tenn.; Treasurer, Dr. J. Berrien Lindsley, of Nashville, Tenn. The efficient and popular Secretary, Dr. Irving A. Watson, holds over.

The President announced that Mr. Lomb had decided to offer four additional medals—of $100, $75, $50, and $25, for the best plans for houses to cost $600, $1,000, and $1,500, which announcement was received with applause.

Dr. J. Howard Tyler, of Philadelphia, Chairman of the Special Committee on *The Disinfection of Rags*, reported that it is an admitted fact that the importation of rags is a prolific cause of the spread of infectious diseases, and that ports of entry are the gateways for their introduction. Foreign disinfections are not to be relied upon; and the Committee proposed a resolution that the health authorities having jurisdiction over matters connected with maratime systems of disinfection should thoroughly destroy all germs before the rags are permitted to be distributed for manufacturing purposes. After a lengthy discussion, the report was re-

committed for further investigation by the Committee during the coming year.

The Association adjourned, to meet at Toronto, the first Tuesday in October, 1886.

Correspondence.

FOREIGN CORRESPONDENCE.*

Professor Schwartze's Ear Clinic—Daylight Illumination—Treatment of Chronic Catarrhal and Purulent Middle Ear Inflammations—Treatment of Mastoid Disease—Eye Clinic not Superior to those of New York—Prof. Volkmann's General Surgical Clinic—Antisepsis—Tuberculous Resections, etc.—Opening of Pericardium; Death a Week Later from Bronchitis.

HALLE, PRUSSIA, December 14th, 1885.

Mr. Editor,—I presume it will not be uninteresting to you and the readers of the *Virginia Medical Monthly*, to peruse a few pages from a colleague in a distant land, with reference to the status of our art and science here.

I regret that I cannot give you a detailed account of all the clinics; for since my chief attention is directed to the study of diseases of the eye and ear, I can only speak of the others, save the surgical, from hearsay. There is enough, however, in this limited scope to interest you in a long article, had I the time or the inclination to inflict such upon you.

The ear clinic is under the directorship of Prof. Hermann Schwartze, who is too well known to demand any further introduction than the mentioning of his name. The clinic, as all the public clinics here, is in conjunction with the University of Halle, which is a government institution. Considering the population of Halle, the material is quite large and offers cases which may be studied at leisure and as carefully as any one may desire. There is only one skilled assistant; so that after one has acquired some familiarity with the methods of treatment, he is allowed to do considerable

* The late receipt of this letter compels us to place it out of its proper place, which is immediately after the department for Clinical Reports.

independent work. The private course of Dr. Schwartze costs 300 marks ($75), and lasts during the session of three or four months.

Daylight is used as the source of illumination and the concave hand-mirror as the reflector. This daylight illumination is a source of no little worry at first, to one who is not familiar with it. After one has used it for some time, however, it is quite possible to distinguish, in the majority of cases, the condition of the fundus of the canal. I am convinced that in cases where the canal is very narrow this method is impracticable.

Naturally, in an ear clinic the same classes of cases occur the world over; but there are one or two classes, with respect to the treatment of which I wish to call particular attention in this letter: Cases of *otitis media catarrhalis chronica*, *acuta*, *subacuta*, and cases of *otitis media purulent chronica*, in which there is perforation.

There is no greater opprobrium to aural surgery than the incurability of chronic *middle-ear catarrh*. As soon as we find a drumhead that shows the signs of this affection and can get a history of a long duration, we are apt to advise no treatment, and tell the patient that he may retain what hearing he has left, but that he must not expect more. As an ultima ratio, we resort to local and general derivatives, the Politzer bag, and so forth.

It is not my purpose to say that we are often not correct, but it is my purpose to say that I believe, in the light of the experience of the last two months, that benefit, at least, can be obtained in many cases. We generally endeavor to convince ourselves of the permeability of the tube and the condition of the middle ear by the Politzer bag. By means of the Eustachian catheter we can *absolutely*, with the assistance of the auscultatory tube, convince ourselves of the absence or presence of fluid in the middle ear and of its consistence.

In these chronic middle ear cases, the great difficulty lies in getting rid of the tough, clinging muco-pus which often almost completely fills the tympanic cavity. The first indication in such cases is to get rid of this. This can be certainly done only by a large paracentesis tympani with the

syringing of the middle ear, through the Eustachian tube. Prof. Schwartze makes the incision in the lower, posterior quadrant, about one or two millimetres from the periphery, and carries it forward for the distance of about three millimetres. A warm three-fourths per cent. solution of table-salt is then forced through the Eustachian tube till the thick muco-pus can be seen in the external auditory canal. I have seen in the clinic here threads of such muco-pus drawn out to the length of four or five inches.

The catheter is used when the perforation or paracentesis is unilateral; when, however, it is bilateral the catheter is dispensed with. The patient is directed to cleanse the nasal passages of mucus by blowing his nose gently; a basin is placed under his mouth and one under each ear. The mouth remains open and the beak of a blunt-pointed syringe, large enough to completely occlude the anterior nasal orifice and containing the same solution, is placed in one side of the nose and a stream of water is sent in, which returns through the other side and through the mouth. After having in this manner thoroughly cleansed the nasal cavity, the same manœuvre is repeated, except that the other side of the nose is closed *tight* with the fingers, and sufficient force is used to drive the water in a gentle stream through the two Eustachian tubes and thence through the middle ears into the basins. This is done four or five times and the external canals are then carefully syringed, when, if the manœuvre is properly performed, the contents of the middle ear are found in the basins under the ears. Some water necessarily passes out by the mouth, but I have never seen a case strangle—not even little children—and Prof. Schwartze informs me that it does not occur.

I have seen this done in cases of subacute and chronic middle-ear catarrh when there was fluid in the cavity, after paracentesis, and in chronic purulent middle-ear catarrh; but *never* in acute catarrhal or purulent inflammation. If paracentesis has been performed, the manœuvre is repeated after four or five days, but in chronic purulent inflammation it may be done every day. If the perforation heals before the middle ear is free from fluid, paracentesis is repeated.

The strictest antiseptic precautions are taken, and a protective bandage is worn over the ear until the opening has healed. This protective bandage consists of antiseptic materials, carbolized or sublimated gauze, and borated or absorbent cotton. A small bit of gauze is inserted into the canal, and several layers of cotton placed over the ear, the whole being held in place by a sublimated bandage.

We know that many urge against the Eustachian tube plan that it is a painful introduction. This is not the case when the nose is normal. If there is total occlusion of one side, it should be introduced on the other, as we know. Even in swollen conditions it can be introduced painlessly by an expert head. After the introduction, patients never complain. The frequent use of the Eustachian catheter for the purposes of inflation, and "thorough-syringing" of the middle ear, constitutes the chief difference here from ordinary routine practice in an ear clinic.

In regard to the *treatment of the mastoid disease*, the proceedings here are somewhat different from those in our country. I cannot go into the indications for this operation, as laid down by Schwartze; I would say, however, that he does not wait till the incontestible local and constitutional symptoms of retained pus are present to operate. Where, however, tenderness on pressure and palpation do not yield to painting the mastoid region with iodine, and the continuous wearing of an ice-bottle (India-rubber), the opening of the mastoid is performed. It is customary to try this palliative treatment for a week or ten days. Of course, if there is no improvement, but rather greater pain and tenderness under this treatment, operative interference is no longer withheld. The mallet and chisel are used, and the greatest antisepsis observed. The opening is made, not immediately over the process, but just behind the external auditory meatus, with a straight line drawn backwards from the temporal spine as the upward limit, and carried in the same direction as the canal, till pus is found, or the antrum mastoideum is entered. This, of course, obtains when we can find no superficial signs of the presence of pus to guide us. It is possible to go to a depth of 2 or $2\frac{1}{2}$ centimetres before reaching the antrum.

The presence of pyæmic symptoms is, however, no contra-indication to the operation. Superficial chiselling of the mastoid is done even for persistent and intolerable mastoid neuralgia. After the chiselling, the lower posterior quadrant of the corresponding drum is destroyed with the galvano-cautery, in order to make the drainage perfect. The after-treatment has nothing of peculiar interest in it; the cases are, however, kept in the hospital till all pain and sensitiveness in the region is gone. Antisepsis is here also continuously and strictly observed.

I visited the *eye clinic* only for two or three weeks, and am therefore not fully capable of forming a decided opinion in regard to it. The Director is Professor Graffe, the nephew of the great von Graffe, the father of ophthalmology. Here I have seen nothing better than we have in New York. The material is vast and varied; but it is quite difficult to do any independent work, since no private courses are given. As a "Herr College," the doors are thrown courteously open to you.

Although not in the line of my specialty, I cannot refrain from mentioning the *general surgical clinic* here, under the Directorship of Professor Volkmann, who is known to us all, but particularly on account of his spoon. The material here also is vast, and of a variety I have never seen surpassed even in New York.

I am free to confess that, in the line of general surgery, I have never seen such invariable good results. It goes without saying, that Professor Volkmann employs *antisepsis*. I have observed that he and his assistants wash their hands and clean their nails more carefully than any surgeons whom I have ever seen operate. He uses a 3 per cent. carbolic acid solution for his instruments; mercuric bichloride, boric acid or salicylic acid solution for irrigating purposes, and antiseptic sponges, ligatures and dressings, cotton, gauze, etc. After being thoroughly washed, the hands are held for a few seconds in a basin of 3 per cent. carbolic acid solution. The locality and surroundings of the proposed incision are also thoroughly washed with soap and water, and then irrigated with the antiseptic solution. No spray is used, and no anti-

septic towels are placed over the parts surrounding the wound. Professor Volkmann claims that his good results are due chiefly to the excessive cleanliness of the hands, which he rigorously demands of the assistants.

Tuberculous resections and amputations heal per primam intentionem without redness even. The results are shown to the class. Only once have I seen pus, and that was in the case of a tuberculous boy, whose knee was resected. The pus was gathered around *one* suture; the rest of the wound was healed, dry, and without redness.

One of the most interesting cases I ever saw occurred some time ago in this clinic. In the operation of *amputation of the breast for cancer*, in a broken-down woman, it was found, on arriving at the ribs, that it would be necessary to go into pleural cavity. This was done, and the breast was demonstrated to the class, through an opening at least four inches long by five wide. I saw the case four days after the operation, when there was no irritation of the wound, and the temperature was one degree only above normal. The pericardium was irrigated with a warm 1–5000 bichloride of mercury solution. The case died a few days afterward of bronchitis, according to the post-mortem.

I trust that what I have written may be of some interest and value to the readers of this journal; and I hope to let you hear from me again while in Berlin.

J. Herbert Claiborne, Jr., M. D.

Analyses, Selections, etc.

Vulvar and Vaginal Enterocele.

Dr. T. Gaillard Thomas, Surgeon to the New York State Woman's Hospital, read a paper on this subject, December 17th, before the New York Academy of Medicine, and appears in the *New York Medical Journal*, December 26th, 1885. He says there are five varieties of hernia which may show themselves in the vagina and vulva: 1. Cystocele, or hernia of the bladder. 2. Rectocele, or hernia of the an-

terior wall of the rectum. 3. Vaginal enterocele, or descent of a portion of the small intestines into the vagina. 4. Pudendal enterocele, pudendal hernia, or descent of the small intestines into the labium majus of one or both sides. And 5. Perineal enterocele, perineal hernia, or descent of the small intestines through the perinæum.

Other varieties might be given, based upon the contents of these hernial sacs, in which the ovaries, the uterus, and the Fallopian tubes, either empty or filled with the products of conception, have been found; or upon some extremely rare development of this condition—such as a case quoted by Sir Astley Cooper, in which the base of the bladder, passing down alongside the right wall of the vagina, formed a hernia in the labium majus of that side. But Dr. Thomas confines his remarks to the descent of the intestines through the pelvic roof, and their protrusion into the labia majora, into the vagina, or through the perinæum.

Although these varieties of hernia have been known for a century and more, they have generally been ignored in systematic treatises. A. Martin, Hart and Barbour, and Emmet, do not mention vaginal and vulvar enterocele; Barnes and Edis make a mere mention, and Courty and Thomas give very short and unsatisfactory accounts. Even in literature, of serial character, it is difficult to find much upon the subject. In 1736, Garengeot first described this form of hernia; he was followed by Verdier, Hain, Sandifort, and Richter. Sir Astley Cooper treated of it fully in 1804. The best account of it is by A. Bérard, in the *Dictionnaire de Médecine*, published in 1846. Peter Young, of Edinburgh, published a paper upon the subject in the *Edinburgh Medical Journal*, April, 1882, and recorded a striking case which illustrates most of the important features of the lesion when occurring during parturition, and soon after it. In the *Transactions of the New York Obstetrical Society* for 1878 will be found a very able and exhaustive article by Fordyce Barker, containing several cases occurring during pregnancy and parturition, and a case reported by Dr. B. A. Clements, U. S. Army, in which eight distinct attacks occurred.

Vaginal Enterocele.—This variety consists in a descent of the intestines into the pelvic cavity, either in front of or posterior to the broad ligament of one side. The intestines never descend directly in the median line, either anteriorly or posteriorly, on account of the intimate relations of the vagina at these points; they always descend a little obliquely, and most frequently posteriorly. Usually the intestines

alone descend, but sometimes the omentum accompanies them; and Petrunti has reported one case in which the hernial tumor consisted of nothing but omentum. Usually the small intestines form the hernial protrusion, but Levret has put one case on record in which the sigmoid flexure of the colon did so, and Boivin and Dugès mention one in which a portion of the large intestines came down as low as the perinæum, and obstructed the vagina.

Vaginal hernia, as a rule, develops itself in the following manner: A loop of intestine gradually pushes downward the prolongation of the peritonæum, which forms the pouch of Douglas, until it impinges upon the outside of the wall of the vagina, and causes it to arch inward. This mechanical influence being continued and gradually increased, a tumor forms in the vaginal canal, inverts one wall of that canal more and more completely, and may end by escaping from the vulva and hanging outside the body, as a complete prolapse of the bladder or of the uterus would do. Under these circumstances, the tumor which protrudes has for its component parts the inverted vaginal wall, the peritonæum, and the intestines. Sir A. Cooper says: "I have had no opportunity of examining this disease in the dead body." Bérard, about 1840, declared that it is very important to know whether "the entire thickness of the vaginal wall is inverted and forms the envelope of the tumor, or if the external coat is torn so as to present an opening through which the hernia passes, carrying before it only the internal tunic of the vagina," and asserts that at that time Sandifort was the only author who had reported an autopsy, and that he had neglected to mention this point. I find reports of several autopsies, and yet this point still remains unsettled.

Unquestionably, the greatest danger which attends this form of hernia (and the same remark applies to the two other varieties, which we shall consider) arises from the possibility of an error of diagnosis occurring from the practitioner being off his guard, and therefore not sufficiently careful in the practice of differential diagnosis. The tumor occurring during labor, and obstructing the progress of the fœtal head, a too rapid conclusion may be arrived at that an ovarian, or parovarian cyst with a long pedicle, has been pushed into the pelvis, a trocar and canula are plunged in, and the operator is horified at the escape of fæcal matter and intestinal gases; or, if in the non-parturient woman, an effort is made to remove it, and, as this effort advances, the operator becomes painfully enlightened as to his error. Let

me quote two cases to impress this important fact. The following is related in the *Centralblatt für Chirurgie*, May, 1879: The woman, aged 52, had had twelve children, the last born twelve years before. A swelling, about three inches long, reddish-blue in color, and covered by granulations and pus, protruded between the labia. A diagnosis of polypus of the uterus was made and the tumor removed. After suffering severe pain in the abdominal region for several hours, death ensued. Upon autopsy, there was found in the pelvis half a pound of liquid blood. A portion of the great omentum and a piece of the transverse colon had been cut away in the mass. In the posterior wall of the vagina there was an opening about five centimetres in diameter. Gunz relates the following: A woman had a tumor occupying one wall of the vagina and presenting at the vulva. A surgeon, mistaking it for an abscess, plunged a bistoury into it; intestines protruded, and the patient died of gangrene.

The most frequent *cause* of the varieties we are considering is parturition. Under the influence of utero-gestation, all the pelvic tissues are greatly hypertrophied and relaxed, and, under the violent effort of child expulsion, the relaxed parts are strained by pressure from the intestines, which are forced down upon them. Nevertheless, some of the most striking cases of the accident have occurred in nulliparous women. These are usually due to violent efforts, falls, and the previous existence of pelvic tumors, which have burst or been removed.

Vaginal hernia, so long as it remains in the pelvic cavity, and does not interfere with parturition, is usually of little moment and of little inconvenience. It is not prone to undergo strangulation, for the reason that the peritoneal protrusion, having no neck, constriction does not often occur. Under certain malign influences, however, occurring during parturition, as well as in the non-parturient state—such as pressure from the fœtal head, inflammatory processes, fæcal impaction, torsion of the contents of the sac, or the existence of a neoplasm—strangulation may occur.

The *symptoms* apt to develop are difficulty in locomotion, pelvic tenesmus, or "bearing down," colicky pains, dragging sensations, tendency to constipation, and, in time, vomiting. Should the accident complicate parturition, obstructed labor is apt to result.

Upon vaginal examination, a tumor is found in the vagina, and is diagnosticated by the following physical signs: It is

supple, soft, and yielding; decreases upon pressure; gives a sense of gurgling to the finger, if not to the ear; increases upon the patient's coughing or straining; yields resonance upon percussion, and is very generally reducible if the patient be placed in the knee-chest position, and efficient taxis be practiced.

Vaginal enterocele may be confounded with the following conditions: Prolapse of vagina, uterus, bladder, or rectum, or a combination of these displacements; with vaginal cyst, parovarian, or ovarian cyst; with a fibrous tumor presenting low down in the pelvis; with a "cold abscess" of the pelvis; or with a marked case of tubal dropsy.

It will be seen that the behavior of a true enterocele of the vagina under pressure differs very much from that which would characterize the pathological conditions just mentioned.

Why is such caution inculcated with reference to the possibility of erroneous diagnosis? Because error creeps in from the practitioner being off his guard, and too little inclined to consider the possibility of a mistake. If he approaches these cases philosophically, and in a proper spirit of diagnostic investigation, it is very improbable that an erroneous diagnosis will occur. Most cases present striking features.

Sir Astley Cooper's description of a case, occurring posterior to the broad ligament, seen by him, is graphic. The patient was a young woman, aged 20 years, who had never had children, and whose case was worth examination on account of a tumor projecting into the vagina. She was placed in a recumbent posture, with the shoulders a little elevated. On examination *per vaginam*, there was a swelling a little above the os externum vaginæ, the size of a small billiard-ball, situated at the posterior part of the vagina, but rather to the left side; it was elastic, and not at all painful to the touch. When compressed, it readily passed away, but, upon directing her to cough, it was reproduced. When on her knees, the swelling became very tense, and much larger than before, and when she coughed, it dilated as any other hernia, but more forcibly. Having placed her again in the recumbent posture, he pressed the swelling entirely away by keeping the fingers about half a minute on the posterior part of the vagina, and then carrying the fingers higher up in the vagina, above the seat of the tumor, near to the os uteri; and having pushed the vagina toward the rectum, he directed her to cough, and the tumor was not reproduced.

Still pressing at the same part, he desired her to rise, and so long as the pressure was sustained the hernia did not return, but almost immediately as the fingers were removed, the hernia became as large as before.

Like hernia occurring elsewhere, those forms which we are now considering may show themselves in two ways:—first, by a brusque and sudden development marked by alarming and decided symptoms; and secondly, by a development so gradual and uneventful as to symptoms as to escape recognition entirely until the mere mechanical results of the hernial tumor force themselves upon the attention of patient or physician. A striking illustration of the former is given by Dr. Young, in which all the symptoms of incarceration of the intestines rapidly and unmistakably showed themselves to be entirely relieved by successful taxis.

In certain very rare cases acute vaginal hernia occurs as a consequence of some traumatic influence destroying the continuity of this canal in its upper part. A striking instance is reported in *La France Médicale*, November, 1881. The patient, three months pregnant, endeavored to bring on abortion by vaginal injections. One of these was immediately followed by violent colic, and in a few days after by abundant hæmorrhage, which continued for several days. At that time a loop of intestines escaped from the vulva, which could readily be returned to the abdomen, but would at once prolapse. On the day after this occurrence, the cæcum made its appearance, as evidenced by the presence of the vermiform appendix. In time this proved to be irreducible, and gangrene occurred, followed by escape of fæcal matter. During the progress of this condition abortion took place. In time the vaginal opening of the intestines closed entirely, fæcal matters passed normally, and the patient made not only a complete, but a rapid recovery.

Some years ago Dr. Thomas consulted two physicians in a case of interstitial pregnancy to decide the question of laparotomy. One of these gentlemen refused to express an opinion until he had had the privilege of passing the entire hand into the vagina. He anæsthetized the patient, and his desire was fulfilled. As he withdrew his hand, however, a loop of intestine escaped from the vulva through a laceration which he had made in the upper part of the vaginal canal. He at once put the patient in Sim's position, introduced a speculum, and sewed up the rent. The patient recovered.

He once saw a similar hernia follow an attempt to replace

a retroflexed uterus by a sponge probang in the hands of a most cautious gynæcologist. As the retroflexed fundus was pressed upon, the sponge suddenly burst through the vagina into the peritoneal cavity, and being withdrawn, came forth entangled in a loop of small intestines. The examiner at once sewed up the opening with a silver wire, and the patient recovered.

It is in the gradually developing, creeping, insidious cases that the danger of erroneous diagnosis lies in ambush for the unwary surgeon.

Pudendal Enterocele, or Pudendal Hernia, demonstrates its existence by an elastic tumor, about as large as a small hen's egg, or a pigeon's egg, about the middle of the labium majus of one side. It may originate in two ways. The round ligament of the female, after passing down through the inguinal canals, lose themselves in two glove-finger prolongations of fibrous character, which run down through the labia majora. Following the course of these ligaments through the abdominal rings and the inguinal canal, the intestines sometimes descend, as they do in the male, along the spermatic cord in getting to the scrotum, and reach their ultimate point of descent in these dartoid sacs. Again, they sometimes pass downward between the vagina and the ramus of the ischium, thus reaching the labium majus from within the pelvis. In its commencement the latter variety resembles exactly vaginal hernia; but instead of inverting the vagina before it, as that does, it separates the vaginal wall from the ischium, and insinuates itself between these parts,

Some French writers divide hernia of the labia majora, or pudendal enterocele, into two varieties:—first, "anterior labial hernia," or that which eventuates from the inguinal form; and, second, "posterior labial hernia, or labio-vaginal hernia," or hernia forming by extension of the peritonæum down in front of the broad ligament and alongside the vagina to the vulva.

From inguinal hernia ending by descent in the labium majus the internal variety may be thus distinguished: (1) the finger, pushing the tumor upward, will pass into the pelvic cavity between the ischium and vagina; (2) at the level of the os uteri, or thereabouts, it will enter the pelvic roof; and, (3) pressure being maintained on the inguinal canal, and the patient being ordered to cough, it will, in spite of the pressure, recur.

In *diagnosis* the following conditions of the labia majora

may be confounded with pudendal hernia: Cyst or abscess of the vulvo-vaginal gland; Cyst of the labium minus, or majus; Abscess of the labium majus; Fatty or fibrous tumor of the labium; Tumors descending from the pelvic cavity.

Dr. Galabin reports, (*Trans. Obstet. Soc., London*, 1884), what he believed to be a hydrocele, an egg-shaped cyst, two inches and a half long, translucent, occupying the labium majus. It had existed three years in a patient aged fourteen, been tapped once, and a straw-colored fluid removed. Dr. Galabin divided the skin on a director, and found a cyst free except at the anterior end toward the inguinal ring, where a firm cord was divided. The patient recovered.

Saenger (*Arch. für Gynäkol.*, vol. xvi) reports two cases in which the contents of labial herniæ were found to be tumors of the broad ligaments. In one case, reported by Hecker, the woman, aged forty, had noticed since childhood a tumor situated in the right labium majus. This mass, formerly easily returned into the abdomen, was at the time of operation irreducible. An incision was made over the the tumor, which was found to be a nyoma of the ligamentum rotundum; weight, three hundred and thirty grammes. Paletta reports a case which was similar, a fibro-myoma of the round ligament being found as the contents of a labial hernia.

The *differentiation* of pudendal hernia from these conditions of the labia should be very carefully considered, for, if an erroneous diagnosis be made here, a fatal result might very probably prove the consequence. The diagnostic signs which may almost be styled pathognomonic, are these: Airy feeling upon palpation, gurgling upon replacement, diminished tension in the dorsal decubitus, diminution of bulk upon taxis resonance upon percussion, succussion upon coughing, and intestinal pains of a colicky character.

There are no very great difficulties attending the differentiation of the disease. The danger is that the possibility of hernia at this point may be forgotten, and deductions drawn without considering it. Although the probability of error be not great, the appalling nature of the accident in which it would result warrants the relation of the following case, which is illustrative of its possibility: A patient had had an abscess just below the external abdominal ring, which, after poulticing, had been evacuated about a month before the time of her visit to me. After this she had felt well until a week before, when, after a muscular effort, the pain had

returned with all the original signs of abscess, and these had continued, although she had painted the part steadily with tincture of iodine. Dr. Thomas examined the enlargement while the patient was standing, and, under a recent cicatrix which was painted with iodine, discovered what he supposed to be a reaccumulation of pus. As the patient came merely for the evacuation of this, I placed her in the recumbent posture, and lancet in hand, proceeded to operate. But he discovered that change of posture diminished the size of the enlargement. This excited suspicions, and, upon further examination, we found that a recent hernia had occurred under the old cicatrix.

Perineal hernia may affect both male and female. In the latter it consists of the descent of the intestines between the vagina and rectum, the advance being made posterior to the broad ligament, and continuing until the perineal muscles are forced apart, and the gut, with its peritoneal envelope, is arrested by the skin. In these cases Sir Astley Cooper declares that the hernial sac "protrudes as far as the skin of the perinæum, but does not project it so as to form an external tumor; its existence in the male can be only ascertained during life by an examination by the rectum; but in the female it may be felt both by the rectum and by the vagina. The sac lies between these two canals."

All these varieties of hernia are usually readily amenable to taxis, and this he has invariably found greatly facilitated by the knee-chest, or genu-pectoral, position. In some rare cases strangulation occurs. Under these circumstances the same surgical practice is indicated as in inguinal or crural hernia—namely, cautious opening of the sac and section of the constricting band by passing up a probe-pointed bistoury.

Dr. Thomas next records a remarkable case of extreme vaginal hernia, which presents some features which he has never met with in literature.

Mrs. K., a multipara of small figure and spare habit, thirty-nine years of age, about six years ago noticed a lump at the vulva, and she began to suffer from difficulty in locomotion, frequent micturition, painful defæcation, dragging in the back and loins, colicky pains in the bowels, and general nervousness and malaise. During the past six years this tumor had steadily increased in size, until it had come down to the middle of the thigh on the right side. She was greatly emaciated, and suffered so much from the symptoms that she felt that any resource which held out the prospect

of even partial relief would be a boon. While the tumor hung out of the pelvis, she could neither stand, walk, nor sit with any comfort, and when by taxis it was restored to the pelvis, she found it so very difficult and painful to empty the bladder and rectum that she was compelled voluntarily to force it out again.

Upon physical examination, as the patient lay upon the back, he discovered a large pinkish-colored tumor hanging from the vulva, presenting all the gross appearances of a huge cystocele. On minute examination it became evident that this superficial impression was entirely erroneous. The index-finger being passed around the tumor and up the vagina, the tumor was found to be attached to the ischium on the right side of the vulva, so that there was no vaginal space there at all, while on the left side it passed up readily and discovered the uterus almost out of reach in the left side of the pelvis. A catheter being passed into the bladder, that viscus was found high up above the pubes and obliquely in front of the uterus.

Taxis being practiced in the knee-chest position, the tumor disappeared with a very slight gurgle, its contents evidently retreating into the pelvis through an opening on the right side. Once only in manipulating the mass did a slight gurgle sound and make itself manifest; resonance upon percussion did not appear distinctly, and yet there could be no doubt that hernia did exist. After the contents of the sac were returned to the abdomen it was evident that their retention there, or even the retention of the sac itself within the pelvis, would prove impossible by any mechanical contrivance which could be devised, for two reasons —first, the great weight of the mass; and, second, the fact that pressure of it against the bladder and rectum when it was returned to the body interfered so greatly with the functions of these viscera as to render the patient utterly uncomfortable. And yet the deplorable condition of the patient and her great mental and bodily distress urgently called for active interference. She had been discouraged from seeking surgical relief, while lesser methods had failed to give her aid, and now both she and her husband were willing to adopt any plan which held out the least hope.

Dr. Thomas performed laparotomy; caused an assistant to keep the hernial sac well within the pelvis by one hand in the vagina; pull all the contents out of the sac; seize this at its most dependent portion, drag it up into the abdominal wound and fasten it there by suture, sustaining the

heavy sac, meanwhile, by two knitting needles passed through and lying flat across the abdomen. They eagerly accepted the proposal.

Dr. Emmet and Dr. Bozeman agreed in the diagnosis, and endorsed the operation proposed.

Upon cutting through the abdominal wall, after an assistant had pushed the hernial mass back into the pelvis, he found in the pelvis a soft, fibrous tumor, which had evidently been pushed up from below, on a level with the symphysis pubis. It was very movable, covered by peritonæum, disconnected with the uterus, and, upon careful examination, proved to have no connection with the bladder. He was at a loss to determine its relations, but, in view of the desperate character of the case, decided at once to remove it by splitting the peritoneal covering, tying a number of bleeding vessels, draining the sac with a glass tube, and fastening the sac into the abdominal wound. The patient made a good recovery, and so far, more than a month having now passed since the operation, has continued to be free from any return of the hernia. He feels apprehensive about the future, but the present is quite gratifying and completely satisfactory.

His explanation of the case is this: This very movable tumor, which appeared to have no fixed anchorage in the pelvis, had originally pushed the vagina before it by entering the pelvic cavity behind the broad ligament of the right side; the intestines had pressed down upon this, and together they had made up the contents of the sac. Dr. H. C. Coe, the pathologist of the Woman's Hospital, has furnished me the following report of his examination of it:

"*Gross Appearance.*—A soft, shapeless mass of tissue, which bears a certain resemblance to an hypertrophied bladder. Weight, 10 ounces. Measurements, 22 x 15 ctm. Average thickness, 15–2 ctm.

"The growth is covered in some places by a layer of peritonæum, and over its exterior are numerous torn pieces of tissue, marking the sites of adhesions. The vascular supply of the exterior of the mass is quite extensive, but its interior is bloodless and poor in vessels.

"On section, no signs of formation can be found—nothing but a softened, œdematous, fibrous tissue. This tissue is easily separated by the fingers so as to form pseudo-cavities, but no true, preformed cavity is present anywhere.

"The tissue varies in color at different points. On holding the mass up to the light, it is seen to be traversed by

bundles, or trabeculæ, of reddish fibers (smooth muscles?), which offer a contrast to the general whitish ground of the tumor.

"*Microscopically*, (1) The growth consists of ordinary fibro-mucular tissue, similar to that of a uterine myo-fibroma. Vessels are few in number. (2) The fluid squeezed from the interstices of the tissue is colorless, and contains no cellular elements, except a few blood-corpuscles (lymph?). (3) The tissue, covering the exterior of the growth, is a delicate membrane, strengthened by interlacing fibers of connective tissue, in the meshes of which are numerous large, epithelioid cells. Nerve-fibers and blood-vessels cross the field in all directions.

Inferences.—(1) This is not an organ, *i. e.*, the bladder. (2) It is not an ovarian cyst. (3) It is not composed (at least to any great extent) of inflammatory tissue.

"*What is it?* I submit two theories, both of which are merely theories—viz.: (1) The growth is a local pypertrophy of the pelvic connective tissue. (2) It is a sub-peritoneal uterine fibroid, which has become thoroughly œdematous.

"I incline to the former view for the following reasons: 1. The situation of the mass at the time of operation, as described to me. 2. The absence of a distinct pedicle. 3. The absence of a complete peritoneal covering. 4. The absence of any 'geodes,' or cavities, in the mass, such as are almost invariably found in a softened fibroid. "Finally, the *tout ensemble* of the tumor, which forbids the thought that it has ever been a firm, hard growth, such as a fibroid.

"*Origin of the Growth.*—The presence of adhesions, in which the mass was buried, the dilated condition of the blood-vessels in those adhesions, and the general œdema of the tissue, all point to some obstruction of the circulation in the tumor. It is not difficult to regard this phenomenal appearance as due to simply a localized œdema of the pelvic connective tissue."

That this tumor had no connection whatever with the uterus or bladder he feels quite sure. His impression is that it belongs, to a somewhat rare class of tumor, arising from the pelvic areolar tissue or the round ligaments, of which quite a number have been recently reported by German pathologists.

A. Martin, in his recent work upon the *Diseases of Women*, says: "In the broad ligaments are to be found also solid tumors which are described as myoma or fibro-myoma. They are not connected with the uterus, but spread out be-

tween the epithelial layers of the ligamentum latum, and can from that point develop as large abdominal tumors, or may grow downward toward the vagina, and, finally, at the side of the vagina, bulge out as far as the vulva, where they present themselves for operation. In rare cases they have pushed through the great ischiadic foramen."

The same author also reports the case of a woman who complained of great weight and vaginal pressure. He found a prolapsus of the anterior vaginal wall, and also of the posterior, Douglas's pounch being filled with a soft mass which seemed to arise on one side of the uterus. He performed laparotomy, and found the mass to consist of an œdematous fibro-myoma of the broad ligament.

Schmidt reports a case of a solid tumor attached by a pedicle to the broad ligament, which caused marked prolapse of the anterior vaginal wall.

Schröder acknowledges the existence "of consecutive-tissue tumors, of very soft consistence, which are saturated with fluid, and which arise in the pelvic connective tissue, and in this situation (subserous) continue to develop. "Their anatomical relations correspond to subserous ovarian cysts," etc.

M. Hofmeier (*Gesellsch. f. Geb. und Gyn.*, Berlin, October 24, 1885) reports a tumor, of the size of the fist, situated between the anterior vaginal wall and the urethra, causing a decided prolapse, and projecting above the level of the vaginal wall to the size of an egg, the spot being somewhat ulcerated. After a division of the capsule, it was easily enucleated. Its attachment was deep in the connective tissue of the pelvis; and it belonged to the rare class of soft fibroid tumors of the pelvic connective tissue. It is highly probable that the tumor which Dr. Thomas removed belonged to one of these curious and rare classes.

Little can be said concerning the treatment of vaginal and vulva herniæ, for the reason that there is but one variety, the pupendal, which eventuates from inguinal hernia, for which very much can be done. That variety is as amenable to treatment by the ordinary truss as inguinal hernia is. The other variety can, to a limited degree, be relieved by pessaries, perineal pads, abdominal bandages, etc.; but we are poor in methods of decided relief, and utterly wanting in those of cure. The plan suggested, and partially carried out in the case which Dr. Thomas related, promises more than any other which has yet been brought forward; but of the validity of this surmise time and experience must

give the proof. If another case of large vaginal hernia presents itself, he should feel inclined to try laparotomy, dragging up the sac and fastening it in the abdominal wound.

B. Schmid says (*Handbuch f. Chir.*, Billroth und Pitha) that attempts were made by Huguier at radical cure of vaginal hernia by an oval incision of part of the posterior vaginal wall and enclosure by suture, but without any lasting result. He must, indeed, be a sanguine surgeon who hopes for much from such procedures.

New Method of Treatment in Uterine Disease—The Dry Method.

Dr. Engelmann said during the annual meeting of the St. Louis Obstetrical and Gynæcological Society, November 19, 1885, as reported in the *Weekly Medical Review*, etc., of December 19th, that this was to be merely a preliminary paper, as he had not yet fully perfected this method of treatment and was not quite ready to place it in full before the profession; but as the same innovation was often in the minds of several he wished to make the announcement before the Society and claim this method which he had gradually evolved as his own. As a method, in its outlines, it was satisfactory and practically complete; yet he felt that he had not yet reached all he wished to attain until he had succeeded in devising a sensible method of applying impalpable powders to the utérine mucosa and evenly distributing them over the surface of the membrane. The dry treatment with powders and medicated cotton, acting upon the uterus, the body of the organ, and the surrounding tissues, was the leading feature of his method of treatment.

Dr. Engelmann reviewed the various methods of treatment customary in different countries, and characterized America as the land of nitrate of silver and iodine—the former, once most popular, now gradually yielding to the latter. He had long since given up as injurious, rather than useless, the use of strong intra-uterine applications, generally speaking, of course, as in certain cases they were needful, and the only proper remedy; he severely criticised the very common custom of mopping the uterine cavity with strong solutions, especially the altogether too common and indiscriminate use of nitrate of silver and iodine, to which since the days of carbolic acid, iodized phenol had been added—the three fluids which in this country generally make up the armamentarium in the treatment of uterine disease.

Dr. Engelmann had at first naturally followed the practice of those about him, but soon gave up the indiscriminate use

of strong fluids, using weak solutions, or dilute fluids. Since 1873 he has endeavored to replace fluids, whenever possible, by powders, at first trying tannin, iron, nitrate of silver (in small proportions) in bacilli, but the preparation was expensive and unsatisfactory; nor did Mitchell's gelatine pencils quite answer, but last spring Mr. Mitchell, of Philadelphia, prepared a very delicate gelatine pencil, which answers better than anything yet made for the purpose of intra-uterine treatment. So also the iodoform pencils of Parke, Davis & Co. are very serviceable. These he uses in case he deems it necessary to treat the mucosa directly, in certain cases, however, resorting to fluids. In the majority of cases he relies on medication applied to the cervix by means of cotton and the powder-blower. He deems it very wrong to treat a diseased uterus through its smallest and most delicate part, the mucosa, but would rather rely on treating that sensitive membrane through the uterus; hence the use of powders and medicated cotton.

Dr. E. mainly uses iodoform, borax, bismuth, oxide of zinc, alum, tannin, calomel, and sulphate of zinc, which are dusted over the cervix and vaginal walls. Iodized, carbolized, borated, tannated, salicylated, and iron cotton, and corrosive sublimate jute he considers the most delicate means of applying a remedy, as it is kept in contact with the parts, until gradually absorbed; the cotton, at the same time, must be judiciously placed, so as to rectify such malposition as almost always exists more or less in a diseased uterus.

This method is a most happy combination, as it combines the best and least irritating way of ameliorating displacement with a delicate and effective method of treating the co-existing pathological condition. Moreover, a support, such as is afforded by the properly placed cotton or jute tampon, is an aid to treatment and a relief to the patient, in morbid conditions not directly complicated with displacement; the sensitive, afflicted parts are supported; a strain is removed.

The glycerine tampon, once so popular, Dr. E. uses but little, but admits that under certain distinctly marked conditions it renders admirable service; but even there it is not necessary, other means can be substituted, and he prefers them to this filthy remedy.

The dry method—the treatment of the uterine mucosa through the muscular and surrounding cellular tissue—has beyond the advantage of greater certainty that of comfort and cleanliness; it is not painful, the patient does not suffer in the office, is not in agony during the treatment, nor does

she go home to be reminded of her suffering by hours and hours of cramps and pain. She leaves the office comforted, feeling better.

Dr. E. does not cast aside intra-uterine applications, but claims that they should no longer be resorted to as a routine of treatment, and when called for should usually be of milder character than now commonly applied.

Many a victim to pessaries will be spared when the dry powder and cotton treatment is adopted, as the gradual replacing of the diseased organ is far better accomplished by medicated tampons, whilst the morbid condition is at the same time done away with, than by the irritating and dangerous pessary—not that the Doctor desires to interfere with the pessary in its proper place as a support to the movable and healthy, but displaced uterus.

The pessary, the intra-uterine application, the glycerine tampon, all find certain indications, but have done great harm by the indiscriminate abuse to which they have been put. More generally serviceable, more reliable as a method of treatment, and less dangerous is the dry method, the treatment of the entire organ, or the mucosa through the corpus and cervix with powders and medicated cotton. Dr. E. soon hopes to devise a method of successfully distributing impalpable powders over the surface of the mucosa, and will then consider his method complete.

Such gentlemen as have witnessed Dr. E.'s treatment have never failed to appreciate its advantages; and the powder-blower, which could not be obtained in the city previous to its use by Dr. E., is now to be had at most of the instrument makers.

Dr. E. has already demonstrated the advantages of this method in his department of the "Polyclinic" and cited a number of cases of disease of the mucosa with profuse discharge, previously treated by others by the intra-uterine method, which had been treated in the "Polyclinic" exclusively by the dry method with the most rapid and surprising results, and promised soon to publish a number of case histories, carefully kept by the staff, which will demonstrate more clearly the method and its advantage.

Dr. E. closed his remarks with the wish that his colleagues would test the method which he had found so efficacious. The Doctor was aware that dry cotton and powders had been used of old, but never in such combination and as the mainstay of the gynæcologist, and no such method had ever been advocated or published; hence he lays claim to this method

at the perfection of which he has so long labored, and claims it as his own.

Dr. Scott spoke warmly in favor of the method advocated by Dr. E , and said he had long used salicylated and borated cotton with certain powders and had found great benefit from its use.

Book Notices.

Clinical Therapeutics. By PROFESSOR DUJARDIN-BEAUMETZ, Physician to the Cochin Hospital, etc. Translated by E. P. HURD, M. D., One of the Physicians to the Anna Jaques Hospital, Newburyport, Mass., etc. Detroit, Mich.: George S. Davis. 1885. Royal 8vo. Pp. xvi–591. Cloth. (From Publisher.)

This work is essentially a translation of the distinguished author's "Lectures in Practical Medicine, delivered in the Hospital St. Antoine, Paris, France," on "The Treatment of Nervous Diseases, of General Diseases, and of Fevers." Our more than casual examianation of the volume before us convinces us that Dr. Dujardin-Beaumetz is justly entitled to all the distinction which he enjoys by common consent—that of being the leader of the many renowned therapeutists of the world. The careful reader of this book receives a new idea from almost every page—even regarding long-familiar drugs, or else his unpublished experience and observation receives positive confirmation from the remarkably observant and acurate recorder who delivered these lectures. The author, in the study of each remedy, makes an immediate or direct appeal to clinical results, and formulates his teachings accordingly. Perhaps we ought not to suggest this as a text-book for students, because its plan does not include reference to very many classes of remedies which should be taught the pupil. But this we do say emphatically, as expressive of our opinion of the work as now presented: that no professor of therapeutics can well afford not to study its teachings, so as to equip himself for instructing his classes; and the general practitioner who fails to consult its pages will be a great loser. In some of the few instances of omission of reference to important actions of drugs, the translator has come in well to fill the gaps with carefully prepared foot-notes. Incidentally, many useful diagnostic hints are thrown out by Dr. Dujardin-Beaumetz, in considering the applicability of a given medicine to certain diseased conditions. A good index is appended to the book.

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Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

Virginia State General Hospital—The Cost.

In our November issue, 1885, we pointed out the *humanitarian claims* upon the State for the establishment of a general hospital. In our December number, we spoke of the value which such an institution would be to the wealthier class of citizens in preparing *trained nurses* to serve their wants when their times of need for such help shall come—as come it inevitably will. The question next naturally arises *what will such an institution cost the State?*

Through the kindness of Dr. T. J. Riddell, member of the Richmond City Council, who has been energetic in his efforts to provide more amply for the indigent sick of our city, we were informed of some recent official estimates by Captain Charles P. Bigger, the efficient and experienced Superintendent of Public Charities of the city of Richmond. His calculations are for the proper equipment of a building, and running expenses of a hospital per annum for fifty daily patients. He assures us that $10,000 or $11,000 as an outside limit is sufficient for the first year—exclusively of rent, etc. The item of outfit would be practically reduced during the second and subsequent years to an item of repairs, etc. Thus we may safely calculate that $15,000 would amply cover *every* expense of the first year, including house rent, surgical appliances, medicines, insurance, etc., and that for the second year an appropriation of about $10,000 or $12,000 would be sufficient. These estimates leave out of consideration the utilizing by the State as a general hospital building of property in this city already its own.

Will it pay the State to make such provision for the indigent sick? Unquestionably it will. How?

(1) It will pay by *encouraging immigration* of parties who will make useful citizens. Some time ago this argument impressed itself upon our conviction by cases which came under our observation. Two expert stone-masons moved to this city, secured work, and proved themselves to be industrious citizens. The half-grown child of one of them (who was a widower) was taken sick. He was unable to pay professional fees, nurse's attendance, buy medicines, and otherwise provide for the wants of his family. Having claims upon no one for special acts of friendship, he had to discontinue business, act the part of nurse and attend to other family demands. Thus he was deprived of income while his expenses were extraordinary. He inquired for a hospital where he might place his daughter for proper attention while he might return to his work, and thus provide for his family wants. He had been accustomed to such hospital provisions in the places in which he had lived. He was so disappointed in not finding either a State or city hospital in Virginia that upon the recovery of his child he moved back to the Northern city from which he moved here, and his friend and family returned North with him for the reason assigned. We have heard of a number of like cases. Want of hospital accommodations deter some from becoming citizens in our State, and, in other instances, induces parties to move to other places where such accommodations are provided.

(2) It will pay by *restoring health to many who, if well, would be able to take care of themselves and their families.* A striking case in illustration of this point came to our notice a few days ago. An able-bodied man with cataract came to to consult a skillful physician—practitioner of our city. The doctor was willing to render the necessary professional service as a charity, but the patient was unable to pay board for the few days necessary for him to remain under professional care, and he returned home to live in his blindness. Had there been a State hospital, he could have been provided for, and as a result of the proposed operation he would have been restored to the active walks of life—enabled to make enough for his own livelihood and possibly help others. As it is, he is a helpless, non-profitable expense upon others.

(3) It would pay by *saving many lives and relieving much suffering.* Want of proper medical and nurse's attention

during spells of sickness or after injuries is the cause of many deaths. This want of proper attention could be removed if means were provided by the State. It is oftentimes impossible for even the most humane and charitably disposed practitioner to give proper help to his indigent patient. If he gives his services he may not be able to furnish further medicines, or the proper surgical appliance, or the food, or the essential nursing, fuel, etc. These things would be provided in a properly equipped State General Hospital.

(4) It would pay by affording *school for the training of nurses*, whose services are needed in every section. So important is this feature that we deemed it worthy of special remark in our last issue.

Our want of space prevents us from pointing out other ways in which a State General Hospital would well repay every expense attending its establishment.

Norfolk Medical Society and Dr. S. K. Jackson.

During the late session of the Medical Society of Virginia, Dr. S. K. Jackson, the recent President, after his election as an Honorary Fellow, took the Society greatly by surprise by making remarks regarding an absent Fellow (for whom he professes to have "high regard"), which reflected seriously upon his professional standing in the regular profession. So earnest were his remarks that they had the effect of changing a vote of election by acclamation to an honored position during the afternoon session into a majority vote against him during the night's session. The charge brought by Dr. Jackson before the State Society as soon as heard of in Norfolk, was considered so grossly misrepresentative of Dr. Herbert M. Nash, that charges were at once brought against Dr. Jackson. It seems that some technical irregularities were followed in the mode of preferring charges against Dr. Jackson by the Norfolk Society. To relieve complications, as a clause in that Society's Constitution provides that "no member shall be allowed to resign against whom charges are pending," after a preamble setting forth that Dr. Jackson "has contented himself with technical objections to the form of a charge," it was resolved that "all charges against Dr. Jackson be withdrawn, and he be afforded an opportunity to make an adequate and public retraction of his objectionable statements against Dr. Nash, or of tendering his resignation as a member of the Society." He accepted the latter alternative. The Norfolk Medical

Society furnished an octavo eight-page authenticated copy of its Transactions, in regard to this matter, to the Fellows of the Medical Society of Virginia.

It would be premature to speak of this affair were it not that a copy of the Norfolk Society pamphlet has been sent to each of the 540 Fellows of the Medical Society of Virginia, and possibly to many other doctors of this and adjoining States. The *Transactions* of the State Society also have just been issued, and this volume contains quite a full report of the proceedings at Alleghany Springs relating to this matter. We would simply at present call attention to all the minutes referring to Dr. Nash's nomination as a member of the State Board of Medical Examiners (see page 308 of *Transactions*) on Wednesday afternoon, *when Dr. Jackson was occupying the Presidential chair*, and to his election on Thursday afternoon (see page 316 of *Transactions*), when *Dr. Jackson was also present.* On neither occasion did Dr. Jackson say a word against Dr. Nash, or suggest the reference of a nomination to a caucus of the few doctors present from the Norfolk Congressional District. In fact no objection whatever was offered by anybody, and hence Dr. Nash was elected by acclamation. The other minutes referring to this affair are recorded on pages 318–322 of the *Transactions*, when the question of reconsideration of election was discussed. Anticipating the importance of full minutes of Thursday night's session, the Secretary used every means in his power to preserve accurate notes of what then transpired.

We have no desire to prejudice the cause of either party in this matter. It is highly gratifying to learn that the Norfolk Society so completely exonerates Dr. Nash from all the imputations cast upon his professional character by Dr. Jackson during the late session of the State Society as unanimously to elect him President of their body for the ensuing year, "as a mark of confidence * * * in the face of the statements which had been made against him." It is a serious reflection upon Dr. Jackson that he is officially requested to resign his membership of so honorable a body as the Norfolk Medical Society is known to be. As Dr. Jackson is an ex-President and Resident Honorary Fellow of the Medical Society of Virginia, it may occur to some of that Society that it is demanded of it, in order to preserve its dignity under the peculiar circumstances, to investigate the matter, and to act accordingly.

There is one point in regard to the minutes of the Society of Thursday night on which it is proper to remark, as it

seems to have escaped the attention of most of those who were present. A vote to reconsider the vote of Thursday afternoon, by which Dr. Nash was elected, was not taken. Hence a parliamentary reconsideration of the vote was not reached, and the election that night of Dr. Kemper by a vote of 46 to 39 for Dr. Nash was unparliamentary and illegal. Dr. Nash, therefore, still stands as the party duly elected by the Society to fill the vacancy on the State Board of Medical Examiners, and is holding his position on the Board by virtue of his election by the Society. But this circumstance in no degree lessens the credit due Dr. Kemper for so promptly resigning the honor when he received notification of his election by the Secretary.

Dr. Jackson's letter to the Norfolk Medical Society is adroitly worded in some particulars. Especially does this appear to be the case in the sentence on page 3 of the pamphlet of the Norfolk Society, which reads: "It [the communication of the Norfolk Society to Dr. Jackson] holds me responsible for the reconsideration of Dr. Nash's election, whereas I will prove that it was moved by *other* parties, and *not through opposition to him.*" Will he prove that he was not responsible for the initiatory steps taken to secure a reconsideration, or will he throw the entire responsibility upon upon another who was almost innocently implicated? Will he prove that the "changed vote" of Thursday night was not greatly attributable to his misrepresentations, according to the belief of his Norfolk confreres, who ask him to resign their Society because of them?

Listerine as a Toilet Article,

Is fast superceding any other preparation in the market. As a mouth or tooth wash, it has no superior, leaving a pleasant flavor in the mouth and an agreeable odor about the breath. For chapped hands and wrists, slight wounds with the razor in shaving, etc., it is excellent. For sweaty feet, and soft corns developing between the toes, etc., it is very valuable. We make no reference here to its more important uses for the surgeon, obstetrician, etc. Listerine is useful for a hundred-and one purposes in the family, and should be popularized.

We regret that, owing to the pressure of other matter, a large number of book-notices, and notices of reprints, etc., are unavoidably omitted from this number.

Obituary Record.

Dr. Jenifer Garnett

Died at his home in Richmond, Va., December 2nd, 1885, after suffering from cancer of the stomach since last March. He was a graduate of the Medical College of Virginia, and was about 40 years of age. He was an active worker in whatever cause he took part, and had a good practice in the community. He was one of the original members of the Medical Society of Virginia, and manifested interest in its undertakings, although he attended none of its sessions except those held in Richmond.

At a meeting of the physicians of Richmond, Va., held in the Hall of the Academy of Medicine December 3d, 1885, the following action was taken:

If our daily avocation did not teach us the lesson, the fearful and constantly-occurring gaps made by death in the ranks of the Richmond medical faculty would admonish us of the shortness and uncertainty of human life. Another of its useful and active members has just died. Dr. Jenifer Garnett, a faithful laborer in the battle against disease, has fallen a victim to the fell-destroyer in its most dreadful and malignant form, and we meet together to do honor to his memory. Therefore, be it

Resolved, 1, That the physicians of Richmond greatly deplore the untimely end of their deceased brother, Dr. Jenifer Garnett, who, after long years of patient labor, had made for himself both many friends and patients, who now unite with us in lamenting our great loss.

2. We offer to his widow and family our profoundest sympathy in their affliction; and as an evidence of our respect, will attend his funeral in a body.

3. That these resolutions be published in the *Virginia Medical Monthly*, and a copy be sent to the family of the deceased.

[Signed] JOHN R. WHEAT, Secretary.

Dr. Albert H. Smith,

One of the most eminent obstetricians, died at his home in Philadelphia, December 15th, 1885, after a long and painful illness.

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Original Communications.

ART. I.—**The Clinical Management of Small-pox in Epidemic Visitations.*** By GEORGE BAYLES, M. D., Orange, New Jersey.

In our capacity as an organized body of active representative medical workers, we may be called upon, sooner or later, to cope with a volume of small-pox disease that may be fairly entitled an "epidemic visitation." Cities no larger than ours are often the centers of this fearful scourge, as the direct result of migration of the malady along the lines of travel, and the unsanitary conditions that are usually prevalent in certain sections of such communities.

Once seated, it is not easily banished, and like epidemic cholera, epidemic yellow fever and epidemic diphtheria, it demands the instant co-operative action of every competent medical man, and every philanthropic citizen, to stamp it out, and relieve it of many of its grosser horrors while engaged in eradicating it. With these thoughts in mind, I have prepared the following paper for your approval, and for such discussion as its suggestions are apt to elicit:

Not many physicians of any considerable experience in

*Read before the Orange Mountain Medical Society, December 18th, 1885.

the duties of our profession would fail to sustain a very creditable examination on the sanitary management of a small-pox visitation. We would not expect to find many, if, indeed, any unqualified in all approved theoretical, as well as necessary practical knowledge relating to protection by vaccination, isolation, restriction of personal intercourse, provision of bed-side attendance, disinfection of persons and premises, regulation of travel and trafic, imposition of a demand for credentials of recent vaccination upon the moving population, arrangements for safe transportation of the sick and the dead, discouragement of promiscuous assemblies in churches, theatres, rinks and elsewhere, encouragement of all forms of general and private quarantine, and the intelligent instruction of the people as to the course and progress of the epidemic, and the hygienic duties of all citizens. I affirm that few would be at fault in proving their knowledge of all these things on a purely theoretical basis. So far, so good.

We need not crave an epidemic for either observation or practice, and common-sense will be a very good aid, if we can retain it, when an epidemic shall make its appearance. Should the black cloud, now resting over an important section of Canada, extend southward into our happier region, we shall then have what has happened many times before, though not often in our individual experience—an epidemic visitation of small-pox. We have the great advantage of time to prepare for it. Our theoretical knowledge may be put in requisition, and, doubtless, will stand the test well; but, we shall have more than that, viz.: The sick and dying actually with us. A great pall of dread and sorrow hanging about us, and a call to stay the ravages of death by our successful, effective treatment of the sick. Devotedly nursing the sick of small-pox will be very courageous and helpful, but skillfully treating the sick to secure their recovery will be our duty and an obligation beyond all others.

That all should recover who are victims of this fell disease, it is idle to expect; but after the first realization that the disease is in our midst (the so-called sporadic cases having been counted and considered), the disease having spread

and multiplied its cases in several quarters, the panic having vanished the timid, and the fact of an epidemic raid no longer to be denied, then the practitioner settles down to routine work with as much zeal and heartiness as the benevolence of his nature will inspire. With the settling down for the exercise of his best professional services, comes the time when something like a "turn in the wheel of fortune" may be expected. Then comes the time when the disease is said to "show signs of some mitigation;" its symptoms are stated to be "more lenient and manageable"—"the death rate slows up," and proclamations advise people not to lose heart, as the disease has evidently received a check, etc. It has, indeed, received a check, and for the very reason that intelligent, faithful physicians have finally grasped the helm of the threatened ship, and, by careful steering, have raised the courage and hope of the frightened crew.

Is an epidemic of small-pox self-limiting? Will the disease cease before it has consumed all that is appropriate for its maintenance? Will it stop because of any inertia born of its vehemence? I think we cannot answer these questions as we would wish to do. There is, however, an end to an epidemic visitation, often before all that has supplied it with victims has been consumed, often long before the whole army of physicians and nurses is exhausted, and simply because the disease has entered into a "hand to-hand" struggle, so to speak, with science, and has been vanquished in short order.

In the hour of peril, when the foulest and deadliest of all migratory diseases is close to our boundaries, threatening to assail us at any moment, we are not likely to be wholly unprepared in hygienic and sanitary safe-guards, but we may, unwittingly, find ourselves unprepared as hand to-hand fighters against the dread malady.

Now let us look to our weapons of war in the medical art and science to be used in the impending struggle. With the disease all around us, what will be our clinical resources for curing our patients?

First and foremost, there will come a time in all scourges of this kind, when all sense of proprietorship in cases, in the

usual acceptation of that term among physicians, should be renounced. The relay system of attendance upon the sick will be most convenient, if not imperative. It is not a time for gain in any sense save the gaining of ground against the common enemy, but it is a common effort to avert or ameliorate a common disaster. It is a time for complete self-abnegation, that the evil may be as brief as possible, and as little wearing upon the energies and vital powers of the physicians and care-takers, as is consistent with their duties and the public welfare. So essential will be visits at short and frequent intervals, and so essential will be daily consultations, that some system of co-operative labor will be found not only a good thing, but an absolute necessity. Banded together, as practitioners of medicine are in a small community, they have every facility for co-operative practice in times of epidemic visitations.

Cases should be reported at some appointed center. The corps of physicians should apportion these among themselves, in some order to be mutually arranged and agreed upon. Certain physicians should be appointed chief attendants in some cases, consultants in others. As far as possible, these respective qualities of service should be equalized. Consultation should be as regular (according to the plan advised), as the attendance, but of course not so frequent. The system of extra charges for the consultative arm of the service should be, for the time being, abolished, and only ordinary fees, due for visits, be charged to patients able to pay, so as to make the reinforced medical service generally operative. Consultations, according to the preferences and whims of patients, should at such times be discouraged, perhaps denied; but consultations according to the system adopted should be maintained with firmness and impartiality. Without such a plan, the more popular physicians will be greatly over-worked, and the lesser lights in the medical ring would be unable to obtain the aid they would surely need in their numerous and trying cases. Both self protection and the public welfare would call for this impartial and economic division of labor within our ranks.

We should then formulate a common plan of treatment

not unlike what is in vogue for general convenience in hospital practice, though subject to any limitations and modifications that the cases may respectively require. Such times are not appropriate for experimental or fancy practice, for the earning of exceptional reputation, either as diagnosticians or prescribers, or for the various emulations so often observed in physicians, except as they emulate each others devotion to their prescribed round of duties, and their determination to do all things well.

There should then be a common source, or determined sources, for medicines and sick supplies. Requisitions on these departments should never go unsatisfied, and the prices should be regulated simply on a basis of cost by the combined board of associated physicians. Requisitions for the poor should be just as liberal as for any other class of citizens, and the payment for the same arranged for by the town or city authorities, on a basis of supplying the things necessary without reference to cost.

A depot or rallying place for nurses and physicians, or duties, should be appointed. When such as are willing to serve as nurses wish assignment to duty, they will go to the public medical *rendevouz* and report for orders. Their compensation can be arranged by the medical corps, and their rights sustained in the final settlement. The municipal authorities would have to pay for some of this service, and private patients for the remainder. When death or convalescence releases the services of a nurse, he or she should report at once to headquarters, and receive a new assignment. Every legitimate inducement should be held out to make this important arm of the service convenient and trustworthy.

Undertakers should combine under the rule to do their work efficiently, rapidly and safely. They could no longer work as an independent body, or as independent of each other, but under the system of co-operative aid, subject, for the better order of arrangement, to the dictation of the associated physicians. Their compensations would have to be reduced to a reasonable scale, and a standard mutually acceptable, and be received in part from friends of the dead, and in part from the civil authorities, and generally, as with

physicians and nurses, in the time of final reckoning and settlement of pecuniary obligations. Interments would necessarily be subject to some understanding and system devised by the civil authorities, and all established rules regulating interment should be imperative.

The duty of vaccination and re-vaccination, "in season and out of season," calls for no new assertion. This duty is prophylactic in result, not only before the appearance of an epidemic visitation, but during its progress. It is co-ordained with all the duties of the physician on such occasions, and calls for systematic action, under the supervision f the corps of associated physicians.

Now what shall be said regarding the therapeutics of the suggested medical alliance? Clearly we should act upon some well-defined, practical and sufficient system. As already intimated, this is not a time for the special refinements of medical practice that are not consonant with the opinions, experience, assured knowledge and common sense of the general profession; and, like in hospital and dispensary practice, a sort of acknowledged established common practice is the more beneficial. This will have to be defined in council. We must act upon the principle that each case is essentially typical, and nothing short of all that is advisable and necessary must be omitted to assure relief and recovery.

As a guide to the scope and arrangement of our system, let us review a form of treatment for a typical case of small-pox under epidemic environments. This will serve to close this paper.

Though a specific form of disease, small-pox does not enjoy a specific form of treatment. Small-pox is specific in the zoölogical definition of the term species, viz.: "*A type of organization, of vigorously determined form and activity, which multiplies in space and perpetuates itself in time by direct generation in an indefinite manner.*" "Thus the essential character of a species is the constant preservation of a type, and its indefinite perpetuation by way of direct generation, a feature which establishes one of the most important of the facts on which species is founded, to-wit, its *incommunicability*. The species do not communicate one with another; this

is an axiom of natural history." This law, if we are permitted to so term the fact, applies exactly to small-pox.

Trousseau gives us ample information on this point. We gather from the statements and reasoning of that author and of others, that the specific nature of small-pox disease frees us from the embarrassment of complications from coincident disease that can, by any possibility, disguise or mask small-pox—at least in one of its several varieties. This is gain to the pathologist, and especially advantageous to the practitioner. With no uncertainty as to the nature of the malady, we have only to differentiate the variety of the disease, and while our remedies are those peculiarly adapted by observation and experience to this species of disease, we are allowed judiciously to modify our exhibitions of remedies to comply with the demands of the various types or forms.

We have the varioloids, the confluent, malignant, petechial, variolæ, etc., and those various forms may characterize the epidemic visitation—thus becoming its prevailing variety or form of visitation.

The practical bearings of all those facts have been intimated, and, indeed, are obvious to the minds of the medical practitioner. We have to treat small-pox disease, but we may not have to grapple with the purely malignant variety, and alas! again we may have this to encounter, just according to the form of the particular epidemic visitation.

As far as possible, it would be our inclination to treat this malady by the "*natural method*," which attempts to imitate the salutary reactions of nature. We know that we cannot cut short the disease; we cannot alter its initial modification of type, or variety of species, but we can coax and guide the disease (so to speak), to a favorable termination more certainly by so-called natural methods than by any attempt at specific or abortive treatment.

A natural method in medicine contemplates the following:

I. "By letting the salutary reactions of nature during the operation of the disease have their way, and surrounding the organism by conditions and circumstances favorable to their spontaneous development, when the symptoms are regular."

II. "By checking their excessive violence by vigorous tempering treatment, intended to reduce the reaction to a degree compatible with the preservation of life and the accomplishment of the morbid function." This would, of course, include depletion by such means and to such extent as the symptoms demanded.

III. "By stimulating the inertia of the nervous system, and enabling it, by vigorous excitant remedies, to satisfy the needs and the requirements of the disease, sustaining the fever, animating the eliminating organs to a proper degree, and, in a word, bestowing upon the living organism the force which it needs to resist the disease, repair its losses and rise from its weakness."

Characteristic pains in the bones and stomach, as also the vomiting cease spontaneously when the eruption is fairly pronounced. These symptoms, therefore, could receive little attention at the hands of the physician that would be really beneficial to the patient. There is no denying that some physicians are greatly alarmed at these symptoms, and enter upon energetic treatment of an antiphlogistic character, under the supposition that they indicate cerebral congestion or inflammation. A general plan of mild antiphlogistic treatment throughout the course of regular variola is indicated. It is obtained chiefly by rest, restricted diet, diluent drinks and cooling ablutions.

Sydenham's cooling method contemplated exposure of the entire cutaneous surface to the air of a prudently ventilated room frequently "until the second day of the eruption, or the sixth day of the disease." This has been proved to be an admirable tempering process, and not less effective for rapid and permanent reduction of temperature than blood-letting is, at times, found to be.

There will necessarily be a range of choice and of wise discretion in the adoption of potent antiphlogistics in the inflammatory stage of small-pox. Our medical depots should, therefore, be well supplied with the most trustworthy diuretic and diaphoretic remedies, purgatives, agents for medicating the ablutions, diluents, demulcent and acidulated drinks. Sedative and alterative remedies will be found of

special value in some cases, either as aids to depletion or as in themselves sufficient to temper the inflammatory condition to a state the least destructive or unfavorable. Camphor, belladonna, digitalis, cherry laurel, and the bromides are most useful among the sedatives; calomel, alkalies, etc., among the alteratives.

We will find the necessity for a variety of agencies in the characteristics of individual cases, but that variety need not be very greatly extended in order to embrace all the remedies that a physician could really find useful in an epidemic prevalence of small-pox.

"If there be a disease where it is necessary to economize the harmony and the assistance of the nervous system, that disease is confluent small-pox."

The frequently fatal fever, and often unexpected death about the tenth or eleventh day, Sydenham says is neither that of origin nor that of eliminative inflammation; it is an inflammatory and putrid resorption fever. In the light of this statement it will be seen how largely dependent we will be upon antiseptic agents for all manner of exhibition. The approved germicides and disinfectants play a most important part in the skillful management of small-pox, especially during epidemics of the disease. The supply department will have a copious drainage in this direction—antiseptics for the patients, deodorizers and disinfectants for the sick apartments, vessels and clothing, and germicidal agents of the most efficient quality and abundant in quantity for every place that could harbor infected atmosphere.

Mercurial inunctions were much employed and found most comforting and therapeutically useful in cases of small-pox that I was permitted to study during the War of the Rebellion. The application made at the beginning of the disease singularly lessens the eruptive and consecutive cicatrices. I have great faith in the advantages to be derived in many cases from the use of mercurial remedies internally. Salivation is known to be most useful in confluent variola. In cases that would not be likely to succumb to a mercurial depression the physician can scarcely have a remedy that, both

topically and internally, assumes so nearly the character of a specific remedy for small-pox.

Large supplies of chlorinated water will be needed to wash the surface of the body at the period when the pus begins to be fetid.

Opium is so generally useful in eruptive diseases of the skin that its usefulness in small-pox cannot be unheeded. Sydenham considered it a specific in confluent variola, almost as certain as cinchona in intermittents. This opinion was shared fully or in part by Van Sweiten, Morton, De Harn and Bœrhaave.

So far as may be consistent with our mission to save life, it will be our duty and pleasure to try to preserve features from disfigurement. Tincture of iodine, or tannin, associated with benzoin and applied to the pustules of small-pox from the outset will often accomplish this result. Glycerine liberally applied to the face upon a mask of soft linen or patent lint will do much good in this direction.

The diet of patients, best adapted to their needs, will be found to consist of articles that can be as readily kept in store as can medicines, disinfectants, and all sick supplies; and for the poor it will be requisite to have such supplies—even to the establishment of sick diet kitchens, for the purveyance of cooked or prepared food.

I think that the many things that the paper has omitted to present will be fully considered in the discussion. I have at least outlined the form, scope, and channels of co-operative medical and civil service in the management of small-pox in epidemic visitations.

Tongaline for Asthma.

J. L. Grant, of Carrollton, Mo., states: "My wife is subject to asthma and has been for years. She had a severe headache during one of her spells, and I gave her a dose of "Tongaline," which relieved her of the asthma. I have tried "Tongaline" several times since when she was suffering and in every instance the asthma was checked. I recommended it to Mr. Joseph Black, a young gentleman of our town, and he says it relieved him every time taken. I know you do not recommend it for asthma, but I can do so"

ART. II.—**Poisoning by Strychnine—Medico-Legal Bearings—Rigor Mortis not Peculiar.** By M. G. ELLZEY, M. D., Professor of Chemistry and State Medicine University of Georgetown, etc., Washington, D. C.

At the term of the Circuit Court for Loudoun county, Va., October, 1885, was tried William Reed for the alleged murder of his wife by poisoning her with strychnine. In this case no autopsy was undertaken until after five months sepulture. The body was much decomposed, and no attempt was made to determine the condition of any of the vital organs with a view to providing evidence tending to exclude or weaken the hypothesis of death from a so-called natural cause. The body was not removed from the coffin, nor the clothing removed from the body. The clothing, an ordinary female's dress, was cut, torn and pulled aside so as to expose the abdomen, and the incision was made, and the stomach and contents "scooped" out and put into a jar to be sent to the State Chemist for analysis. No strychnine or other poison was found.

However, looking down into the nearly empty abdominal cavity as the body lay in the coffin, some of the physicians believed that the promontory of the sacrum projected forward more than was natural, and upon this notion a theory was constructed that the woman had died in a state of opisthotonos produced by strychnine, which had continued until the exhumation five months after death. But those who "laid out" the dead body detected no rigidity. The body was by them carried by the feet and shoulders, and any *ante-mortem* forward curvature of the spine inevitably thereby removed. Any unnatural curvature forward which the physicians or others thought they saw when looking down into the abdominal cavity under the circumstances of the so-styled autopsy, could not be due to any *ante-mortem* condition.

To suppose that strychnine or any other drug can tetanize a dead body would be to push absurdity to its utmost limit. In a recent celebrated case it seems to have been held that a dead woman at the bottom of a reservoir may open both her hands, scoop them full of mud, and then shut them up again. Executions in pursuance of judgments founded on

such superstitions are not lawful. They are not excusable homicides; they are savage murders done by unpunishable communities.

There is no greater reproach to the jurisprudence of this evening of the nineteenth century so lighted up by the brilliancy of science than the manner in which autopsies are performed in criminal causes.

There is no greater reproach to the science of medical jurisprudence than the manner in which these bungling performances are worked into subsequent form to meet the exigencies of a prosecution. The dramatic style in which authors have dealt with the subject of *post-mortem* opisthotonos in cases of poisoning by strychnia is responsible for much lamentable error in originating untenable prosecutions. In the notorious Palmer case it has come down to us that there was a peculiar rigidity of the body when exhumed two months or more after death. It is thence held by every prosecution that we are to expect to find this condition of things in the bodies of those dead from the toxic effects of strychnine.

I have given this subject great attention for many years, having made an immense number of experiments and observations upon a great variety of animals, and have never yet seen anything peculiar in the rigor mortis after death from strychnine in any case whatever. I have also gone carefully over the whole literature of the subject in the library of the Surgeon General's office at the Army Medical Museum, and having paid due attention to all that has been written upon the subject, I am of opinion that the medico-legal importance of this supposed fact has been unfortunately exaggerated. The idea of muscular rigidity, which may exist after three or four months' sepulture, being due to the subject having died from the effects of a quarter of a grain of strychnine, is upon the face of it absurd.

Rigor mortis is a natural condition due, so far as it can now be explained, to a consolidation of the gelatinous or semi-fluid contents of the sarcolemma. The time of its access and the length of its persistence has no known or established relation to any peculiar disease or manner of death.

The commencement of decomposition marks the beginning of the relaxation of rigor mortis. Can it be held that the delay in the setting in of decomposition which can suffer the rigor mortis to persist for several months can be produced by a fourth of a grain of strychnine? It has not been hitherto regarded that strychnine is so potent an antiseptic.

To attribute the persistent rigidity of the body in the Palmer case to the *post-mortem* effect of a fraction of a grain of strychnine is, according to my best judgment of the matter, absurd and ridiculous. A crook in the spinal column, involving the promontory of the sacrum and two or three lumbar vertebræ, as delineated by one of the medical witnesses in the Reed case, existing five months after death, could not, without doing violence to all anatomical and mechanical knowledge, be attributed to the *post-mortem* influence of a fatal dose of strychnine. Fortunately for William Reed; fortunately for justice, this case came before a jury of the level-headed yeomanry of Loudoun county, and was conducted by a prosecuting officer who was singularly fair and just. The case was submitted without argument, and the man promptly acquitted.

Another point of interest arose in this case. The question, viz., whether poisoning by strychnine can be diagnosed from symptoms alone as described by non-professional witnesses in the absence of chemical results, and in the absence of a detailed autopsy which might have shown the existence or non-existence of fatal lesions of some of the great vital organs. Both Dr. Taylor, the very experienced medical jurist, of Richmond, Va., and myself testified that in the case before the jury neither of us would feel justified from the evidence produced in expressing any opinion as to the cause of death. It was held, and correctly, that the failure even of so able and experienced a chemist as Dr. Taylor (who has certainly had as much experience in such cases as any man now living in this country), was not proof of the absence of strychnine. Nevertheless, as Dr. Taylor said to me in his expressive way, "his failure to find would prove a very debilitating circumstance to the prosecution."

The very interesting question was, however, now brought

forward whether strychnine had ever been found later than about forty-five days after sepulture? And whether it was not either removed from the body at the end of about that time, or chemically changed so as to fail to respond to the ordinary chemical tests. In the late edition of his work, Dr. Wormley discusses that question and inclines to the affirmative. Experiments are described made in Germany on dogs killed by nitrate of strychnine and buried and dug up and examined after some weeks, when no strychnine could be found.

After examining all the facts, I came to the conclusion that this negative evidence is inconclusive for lack of a complete knowledge of the conditions of sepulture of the dogs experimented upon; and for the further reason that the nitrate of strychnine would probably be much more readily decomposed by chemical influences than perhaps any other salt of the alkaloid. It goes without saying that these complex molecules containing several nitrogen atoms are known to be peculiarly prone to decomposition, disruption and dispersion. In this salt we have nitrogen atoms in both the alkaloid and acid. In this country, moreover, the salt which is always furnished the non-technical purchaser is the sulphate. Such a purchaser asks for strychnine and always receives the sulphate. The sulphate would almost certainly be the salt used in this country by the criminal poisoner, and this is the most stable of all strychnine compounds, and least liable to be chemically disturbed by the conditions it would encounter in the human cadaver under ordinary conditions of sepulture.

I am not at present prepared to understand that strychnine can exist in the cadaver in any form incapable of conversion into crystals of the sulphate, nor that such crystals can be obtained which would fail to respond to the usual microchemical methods of identification. It appears to be established, that it can exist and be capable of identification after years of exposure in contact with putrid matter. More thorough investigation of this point is highly important.

In all cases where murder is charged by poisoning, the first essential step is to prove the *corpus delicti*. That is to

say, to prove the fact that the deceased person died by poison and did not die by natural disease. The *corpus delicti* must be first established upon sufficient data, and cannot be inferred from suspicious circumstances or alleged motives of an accused person. It must be shown that somebody has died from poison or from drowning before anybody can be lawfully hanged for murdering them by one or other of those methods. This is science, common sense and law in happy concord—a concordance unhappily not often reached in practice. In the Ryan Case, the Virginia Court of Appeals merely lays down this obvious truth, declaring that until the *corpus delicti* has been established beyond a reasonable doubt, no evidence can be invoked to connect an accused person with the commission of the supposed crime; but that opinion has been criticised as "new law" by those who ought to know better.

It is by loose and bungling autopsies that the evidence necessary to establish the *corpus delicti* in such cases is almost sure to be irretrievably lost, and can never be restored by constructions and inferences. Therefore a statute prescribing what shall be and what shall not be done, clearly establishing a mode of procedure, and providing for the just compensation of competent experts to conduct autopsies, is a matter of pressing necessity.

It may be held that the proceedings at coroner's inquests are sufficiently defined by law and by practice. Those who have taken part in numerous trials as medico-chemical experts, know how very remote from the truth such a contention is. My own experience enables me to say that in nearly every case that has been tried in Virginia within the past twenty-five years, this part of the proceedings has been lamentably and grossly careless and defective. The result has been the escape of many of the most atrocious criminals, on the one hand, and, on the other hand, the conviction of some who ought not to have been convicted. And often—too often—the judgment of competent persons has been left in painful uncertainty as to the question of a crime having been committed.

From this state of uncertainty, some take refuge by declaring that the maxim of the law which holds it better that

ninety-and-nine guilty escape than that one innocent should perish at the hands of the law, is wrong, and that it is necessary for the protection of society to inflict the extreme penalty in some cases admitting of possible doubt as to guilt. But punishment without clear and indisputable conviction is monstrous in itself, and is the most effectual of all means of utterly defeating the purposes of the law and the ends of justice.

1012 *J Street, N. W.*

Clinical Reports.

Case of Intussusception of Bowels. Successful Treatment by Copious Enemata of Infusion of Tobacco. By R. RANDOLPH BALL, M. D., Cascade, Va.

On the morning of November 25th, 1885, I was called to see L. M.—a colored woman, single, eighteen years of age—suffering with violent paroxysmal pains in the umbilical region. She had felt these pains first during the previous evening while at a neighbor's house. The pains had been accompanied from their beginning with recurrent spells of vomiting.

Considering the race and surroundings of the patient, my first suspicion, on "general principles," was the possible existence of a "second person in utero," although after a careful examination of the patient no such condition was found. But just over the right inguinal region, a distinct tumor—enlarged to the size of a hen-egg or more, and tender—was discovered, and in this tumor a very intensely acute pain existed, paroxysmal in kind, and not materially increased by pressure. There were no inflammatory symptoms. No action from the bowels had taken place for several days, and the patient's condition grew hourly more hazardous on account of the increasing intensity of the pain, etc.

At once I determined to adopt what appeared to me to be the most rational treatment, namely, to thoroughly though cautiously cause relaxation of the whole muscular system—hoping thus to overcome the spasmodic muscular contractions of the invaginated bowel. To accomplish this, I decided to use copious enemata of infusion of tobacco leaves, and push the use of the remedy to the full extent of its safe constitutional effects.

At this point I called in my friend, Dr. James, of Axton, Va. At his suggestion, the enemata were kept up consecutively every hour for twelve hours. The infusion was first made of a drachm of tobacco to the pint of water, and was straw colored. The strength of the infusion was increased by about a drachm of tobacco for each injection until finally about two ounces were used for each enema.

After using about a dozen of these injections at intervals of about an hour between each one, the patient was elevated by the heels over a sheet, and a large water-bucket full of warm water was conducted by means of a rubber rectal tubing from the bucket, suspended above the body, into the bowels. The whole amount of water was easily accommodated by the bowel, and gradually the intestinal knot about the ileo-cæcal region disappeared. The patient's body was then laid horizontally on the bed and stimulants were administered by the mouth.

After this treatment, the woman had no return of the troubles in the inguinal region, and in a few days a copious movement took place in the upper part of the bowels. She is now convalescing and bids fair to have a good recovery.

This patient had been an habitual dirt-eater, and her general appearance showed an anæmic condition of the system.

I believe the plan adopted to relieve this woman a valuable method of treatment in all such cases and worthy of a fair trial. Had the intussusception not yielded, of course operative measures would have been adopted.

Ulcerating Syphilide of Face—Its Diagnosis from Lupus and Epithelioma—Value of Iodides in Late Syphilis. By HENRY WM. BLANC, M. D., House Physician New York Skin and Cancer Hospital, etc., New York, N. Y.

The following case came under my observation while an interne of Charity Hospital, New Orleans, in the Spring of 1883:

A negro man, aged 35, and a native of Georgia; gave no history of hereditary disease, but said that both parents had lived past the age of 65 in good health. There were no visible lesions about the genital organs, and he denies ever having had any venereal disease. He enjoyed good health up to the

year 1874, at which time he was occupied as a diver, remaining under water some time in order to saw the posts of a railroad bridge then being built near Pascagoula, Miss. His throat became sore, the parts about the pharynx inflamed and swollen, producing difficult deglutition. He consulted a physician, who clipped the uvula and cauterized the parts, dispelling the inflammation.

After removing to a Louisiana plantation, he remained in good health for nearly three years, when an ulceration within the nasal passages compelled him to seek treatment at the New Orleans Charity Hospital. The ulceration, according to his statement, began in the back of the throat, progressed forwards, and was accompanied by swelling of the face. The latter disappeared before his admission into the Hospital in October, 1877.

For the succeeding five and a half years he was treated at the Hospital, first in the wards, and later as an out-patient, visiting the dispensary at irregular intervals. During this period the disease gradually extended to the skin of the nose and forehead, spreading over the right cheek and a portion of the upper lip. The nasal septum was destroyed, necessitating the removal of the nasal bones, while gradually the skin above the left eye, then the lid, and finally the sight of the eye, were destroyed. The treatment during this time, according to the books of the Hospital, was cauterization. Internally, he received bi-chloride of mercury and iodide of potassium, and occasionally Donovan's solution, but none of these remedies produced any visible beneficial effects.

In April, 1883, I came in charge of the patient, through the courtesy of Dr. H. A. Veasey, the attending surgeon. I had observed him when he re-entered the ward six months before, and his condition now was, if anything, aggravated. The nose was entirely gone; the cartilage and bones had long ago been removed in a slough, and the greater portion of the vomer, perpendicular plate of the ethmoid, and portions of the superior maxillary were destroyed. Earlier ulcerations about the upper lip, right cheek and nasal fossæ had healed—the two former leaving depressed scars, while around the nasal opening the cicatrices formed a ragged border. The opening had a peculiar effect on the voice, giving it a hollow sepulchral sound. There were cicatrices on the velum pendulum palati.

The disease was now expending itself in the shape of a sloughing, ulcerated surface, extending from the left ramus of the lower jaw over the convexity of the cranium, and

down again upon the right temple as far as the zygomatic process—limited behind and above by the parietal protuberances; below, on the right side, by the superciliary ridge; in the center by the nasal spine, and on the left by the lower angle of the orbit. It will thus be seen that the entire forehead, and more than half of the hairy scalp, were the seat of continuous ulceration. The sense of smell, of course, was gone, as also the sight of the left eye; otherwise his faculties were good. The skin on the body was quite smooth, but here and there a few dark blotches, averaging a quarter of an inch in diameter, could be distinguished on careful examination.

The case had been diagnosticated "lupus exedens," and no other diagnosis had been made, but as is usual in such cases, when treatment failed he was given anti-syphilitic remedies, lest syphilis *might* be the underlying cachexia. This treatment, too, had failed, and the ulceration was daily becoming more and more offensive.

When the patient came under my care he was taking hydrargyri bi-chloridum, gr. $\frac{1}{16}$, and potassii iodidum, gr. x, thrice daily; and on the ulcerated surface an ointment of iodoform (℥ss to lard ℥j) was applied after cleansing the sore with a douche of carbolized water. This treatment was continued for several weeks without any improvement resulting, when I determined to stop the mercury altogether, and give the iodide of potassium in ten-grain doses thrice daily.

As a local application the following was used:

℞. Pulverized iodoform.....℥ss
Tincture of iodine.
Glycerine.....$\overline{aa}$ ℥ss.—Mix.

This was painted on the ulcer twice daily after carefully cleansing its surface with a dry cloth, gently applied. Later the paint was applied only once a day.

The improvement under this treatment was immediate and remarkable. The pus secretion and consequent crusting soon began to cease, and a pinkish surface, full of small healthy granulations, presented itself. These granulations were occasionally assisted with lunar caustic.

In the process of healing, little isthmuses of healthy tissue were thrown out in all directions, uniting with one another, and leaving in their interstices peculiar and characteristic oval patches of granulations. In three-and-a-half months the bad-smelling, mucous secretions from the nose had ceased, and the entire ulcer had healed—the healing process extending down to the center of the shrunken eye-ball. There was,

however, a little irregularly shaped raw patch, about the size of a nickle piece, which remained unhealed. This was over the site of the lachrymal gland, and seemed to be irritated by the constant motion of the eye-ball below.

Such was the condition of the man when he passed out of my care in October, 1883, his general health being excellent. I saw him several times during the succeeding year, and when last observed the cicatricial skin was much less delicate than at first, and the raw spot about the left eye was unhealed, but more circumscribed. His occupation now is that of a day laborer, at which he earns a good living.

In reviewing the case, the points that seem worthy of special consideration are—(1) The long duration of the disease; (2) the diagnosis; and (3) the rapid improvement on changing treatment.

Duration.—Syphilis, as a rule, runs a far more rapid course, and it would seem probable that the patient had neglected his medicine at the beginning of treatment, were it not for the fact that during six months of unremitting specific medication in the hospital, he did not show the least improvement.

Diagnosis.—I hardly see how the name "lupus" can be applied to this trouble, unless it be taken in its etymological sense to mean lupoid—eating. To call it syphilitic lupus would be misleading, for syphilis and lupus are two distinct diseases. Doubtless the location of the disease about the nose, the tuberculated appearance and destructive ulceration, together with its rather long duration, would point to lupus vulgaris rather than to syphilis, and the differential diagnosis in favor of the latter must hinge upon a nice distinction.

The edges of the lesions were clear-cut, and presented none of the soft yellow spots so characteristic of lupus vulgaris, but instead, there was a serpiginous ulcer terminating down on the left cheek in distinct rupia-crusts. The soft palate showed cicatrices of a former ulceration, but its shape was unaltered, and its surface bore none of the granulation-like papillæ, characteristic of lupus of that region. Then the history showed the inflammation to have begun in the post-nasal mucous membrane, and not in the skin, as is usual with lupus.

Epithelioma is a disease which must be considered before completing the diagnosis, but it may be excluded in this case, as was lupus vulgaris, by the serpiginous and very superficial character of the ulceration, absence of a deeply infiltrated waxy border, with blood vessels radiating from it, and the presence of rupia. Moreover, the disease began deep in the mucous passage some distance from the skin. The patient was 26 years of age when the trouble began in his throat—rather late for lupus and rather early for epithelioma. It suits syphilis better.

In *treating* the patient, it was resolved to give the iodides a fair chance; so the mercury was discontinued internally, and the iodine paint was used externally. It is to this paint and its constant use that I believe the cure was mainly due, for immediately after applying it the unpleasant odor of the secretions began to subside, and the ulcer took on a healthier look. The iodoform, partly in solution, do doubt acted as a stimulant to nutrition and a local anæsthetic, and the iodine of the tincture, besides being a mild caustic and antiseptic, probably served a purpose similar to that exercised by the iodide of potassium given internally.

It is worth while noting that from the time that the use of the glycerine mixture was begun, no *water* was allowed upon the ulcer, and also that granulations sprung up and went on to cicatrization in spite of the constant presence of the iodine.

This case, then, is one more testimonial in favor of the iodides in late shphilis; but I think the lesson that it teaches is that in extensive syphilitic ulcerations we should not rely solely upon internal treatment to produce a cure.

Case of Vesico-Vaginal Fistula, Resulting from Childbirth —Cured by Two Operations. By ROBERT GLASGOW, M. D., Fincastle, Va.

I was called on the 19th day of April, 1883, to see Emma S., a negress 28 years old, of healthy and robust appearance.

Upon inquiry, the patient informed me that she was married at the age of 23 years, had given birth to one child at term, and had had three miscarriages. Since her last labor (which was hard and protracted), twelve months previous to my visit, she has had an obstinate bladder trouble, which her physician, who had been treating her for ten months, pronounced "pressure of the womb on the bladder." His treatment, which had been altogether medicinal, had not been at all beneficial.

Suspecting the true nature of her trouble from the description she gave me, I proceeded at once to make a vaginal examination. Upon introducing my finger into the vagina, I discovered a fistulous opening, which readily admitted its passage on through into the bladder. Having explained to the patient the character of her trouble, a day was appointed for her to come to my office in order to make a further and more satisfactory examination. In this I was assisted by my partner, Dr. J. R. Godwin. On placing the patient in Sims' position, and with the aid of a Sims' speculum, it was found that the fistula was nearly concealed from view by a transverse fold of the anterior wall of the vagina, which had been drawn backward by the contraction of cicatricial tissue. When this fold was pulled forward with a tenaculum, the opening was fully exposed and the prolapsed wall of the bladder seen through it. It was situated high up in the anterior fornix vaginæ, just in front of the cervix uteri, and in such close proximity to the same that the anterior lip of the cervix formed the posterior or upper lip of the fistula, which was from one-half to three-quarters of an inch in diameter. Size and position of the uterus, normal; cervix very red and granular. The patient was now anxious for an operation, as it had been explained to her that this was the only hope of a cure.

Knowing that Dr. E. N. Wood, of the neighboring town of Buchanan, was well equipped with the instruments necessary, we invited him to see the case and also to do the operation. After a careful examination, the Doctor agreed to undertake it, though great difficulty was anticipated in exposing fully the edges of the fistula for scarification, and in adjusting the lower border to the irregular line of the upper edge, formed principally by the projecting anterior lip of the cervix.

The day was set for the operation. In the meantime I made topical applications to the cervix twice a week, first of nitrate of silver, and afterwards of Churchill's solution of iodine. I ordered hot water injections.

The following gentlemen were present to witness and assist in the operation. Drs. Arnold, Simmons, Latané, Doggett, Godwin and myself. The patient having been chloroformed and placed in Sims' position, the Doctor proceeded to divide the edges, which was somewhat delayed on account of hemorrhages. The line of scarification was carried across the anterior lip of the cervix, and to some distance on each side of it, beyond the angles of the fistula, and when completed was somewhat crescentic in shape, the upper arc of the circle being shorter than the lower. This necessitated the introduction of the sutures, as it were, toward a common center, to prevent puckering. The fistula was closed transversely to the axis of the vagina, by six interrupted silver sutures. The patient was put to bed; a self-retaining catheter was put in situ, and sufficient opium was given to keep the bowels locked up. She got along very comfortably till the tenth day, when the sutures were removed, when it was observed that two of them had cut through, union having occurred to such an extent as to leave the fistula about one-third its original size.

And now comes the remarkable part of this case. Although there remained this opening through which you could readily pass the sound, there was no leakage from the bladder, unless the patient took violent exercise or was on her feet a great deal, until the accumulation of urine was sufficient to cause very considerable distention of the organ. By getting up once or twice during the night to evacuate the bladder, she kept her clothing and bedding dry and clean, whereas, before the operation there was constant leakage, day and night.

The explanation of this as it occurred to me is, that a fold of the mucous lining of the bladder acted as a valve, preventing escape until the organ reached a certain degree of distention, when it ceased to act as such. The patient for a time was so much relieved that she was indifferent to a second operation. In the course of fifteen months, however, she presented herself again, and said her trouble was getting worse, and that she desired another operation. Although the urine still collected to such an extent as to create a desire to evacuate her bladder, which was done *per viam naturalem*, examination showed that the fistula had assumed very nearly its former size. Arrangements were made to perform the second operation, about one week after her menstruation in October. This was accordingly done by Dr. Wood, assisted by Drs. Latané, Simmons, Nelson, Godwin

and myself; the fistula was closed this time transversely, as in the previous operation, the only difference being that a broader surface was denuded, and that the sutures were introduced with a long curved needle, and passed more deeply through the anterior lip of the cervix. Seven sutures were required, and when they were removed on the tenth day, it was found that union had taken place throughout, and that the cure was complete.

It may be interesting to note that the inflammation of the cervix subsided rapidly after the fistula was closed, thus showing that it was kept up by the irritation of the urine.

I have reported this case,—

(1) Thinking it would be of interest to some as a successful operation for vesico-vaginal fistula in a rural district, such as this, which is a comparatively rare thing.

(2) It may stimulate others in rural practice to take hold of these unfortunate cases, and others of a kindred character, and treat them successfully, thus doing away with the necessity of having to send them off to a specialist.

Proceedings of Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, *January* 14*th*, 1886.—The President, J. C. Wilson, M. D., in the chair. W. E. Hughes, M. D., Recorder.

Cancer of Œsophagus—Metastasis to Stomach and Liver.

Dr. T. S. K. Morton presented a cancer of the lower third of the œsophagus with metastasis to the stomach and liver, from a woman, æt. sixty-one years, of good family. Her illness commenced, by her account, eleven weeks before her death, with jaundice, vomiting, constipation and lancinating pain in the right hypochondrium. The vomiting became uncontrollable, the matter several times containing coffee-ground material. After death there was found a scirrhus cancer of the lower third of the œsophagus extending to the stomach, with no narrowing of the œsophageal lumen. The retro peritoneal glands were involved and the head of the

pancreas slightly. Scattered through the liver and stomach were numerous secondary nodules.

Cirrhosis of Liver with Perihepatitis.

Dr. Morton also exhibited cirrhosis of the liver with perihepatitis, removed from the body of a woman, æt. forty years, who had been an excessive consumer of strong spirits. Symptoms had been present for five years. the most prominent of which were general œdema with marked ascites and diminution of the area of liver dulness. She died of an intercurrent attack of facial erysipelas. The liver weighed thirty-six ounces and was strongly adherent to neighboring structures. At its entrance into the liver the portal vein was much contracted and below this point dilated.

Amyloid Degeneration Following Chronic Dysentery.

Dr. Morton exhibited a specimen from a patient, a girl, æt. twenty years. She had no history of syphilis, and there was a perfectly good family history. She had been in poor health, but with no positive symptoms for two years. Last summer she had whooping-cough. After that she improved steadily till three weeks before her death, when profuse diarrhœa with high fever set in. This was the first attack of looseness of the bowels she had had. Jaundice gradually developed. The liver was found to be enlarged. The urine contained albumen and casts. The diarrhœa persisted, the passages containing blood and pus. At the autopsy the liver, spleen and kidneys were found infiltrated with amyloid material and the large intestine was throughout in a state of chronic dysenteric ulceration.

Dr. James Tyson said this was the first case he had ever met with in which there was this association of anoyloid disease with dysentery as the etiological factor although this seems the only possible cause in this instance where the possibility of syphilitic disease seems excluded.

Dr. W. Osler thought it was well recognized that chronic dysentery might be followed by extensive amyloid disease. He had met with one or two instances in connection with chronic diarrhœa which post-mortem examination showed dependent on chronic dysentery with very much the condition of bowel present in Dr. Morton's specimen.

Retro-Peritoneal Sarcoma with Extensive Thrombolic Degeneration.

Dr. W. Osler presented a spindle-cell sarcoma of the retro-peritoneum with entensive thrombolic degeneration, and

gave a history of the case. A man, æt. sixty years, was admitted to the University Hospital in September, 1884, with an abdomiual tumor which had been noticed for about six months. He had lost flesh and strength but there was no pain. The tumor formed a solid mass, occupying a medium position, extending above the umbilicus, and could be readily separated by palpation from the spleen and liver. The case was regarded as one of Lobstein's retro-peritoneal sarcoma. For several weeks the patient passed daily over seven pints of clear urine of low specific gravity without sugar or albumen. The patient was subsequently admitted to St. Mary's Hospital under Dr. O'Hara; and while there Dr. Mears aspirated the tumor—the upper part of which had become soft—and drew out nearly two quarts of bloody serum. At the autopsy the tumor was found to occupy a central position, was covered by peritoneum, and was attached to the tissues in front of the symphysis pubis and seemed to have grown from the subperitoneal connective tissue in this region. The upper part of the mass was represented by a soft fluctuating cyst containing blood and shreds of firm thrombi; the greater part formed a solid mass, which, on section, presented a brownish red color, was firm, dry, and had all the appearance of an old unstratified thrombus. In an area at least 8x7 inches this remarkable condition existed. On the lower part there were two or three greyish white masses, evidently of a sarcomatous nature. The capsule was formed of condensed fibrous tissue, beneath which in many places were recent extravasations. The weight was estimated as at least eight pounds. The lymphatic glands were not enlarged. The kidneys were fibroid. The liver presented several secondary masses, one the size of an orange. Microscopic examination showed the primary and secondary masses to consist of closely-packed spindle-cells.

The reporter drew attention to the rarity with which spindle-celled sarcoma forms a large abdominal tumor and to the unusual site of origin. The most interesting feature was the remarkable transformation which the greater part of the mass had undergone. This was attributed to repeated hemorrhages and the gradual conversion of the extravasated blood into a dry, hard thrombus. Such a thrombolic change in a tumor was most unusual and he had not been able to find reference to a similar instance. A third point referred to was the polyuria, which was doubtless due to irritation by pressure on the renal nerves; and lastly a reference was made to the facility with which the growth might have been removed.

Dr. J. E. Mears thought the growth could have been removed, though the removal would have been attended with some hemorrhagee.

Dr. Tyson would like to ask Dr. Osler what, in his opinion, was the effect of thrombolic degeneration on the histological elements of tumors? And again, is it possible for clots of blood to be converted into the tissue of the original tumor, as is asserted by some?

The President announced that the case was of much interest from a clinical standpoint in view of the possibility of surgical interference, and asked Dr. Osler whether the conditions as found post-mortem suggested any means by which such a tumor as this could be diagnosticated from a similar growth occupying the more usual position in the lumbar region?

Dr. Tyson, in connection with the clinical history, called attention to a retro-peritoneal sarcoma presented by him to the Society last winter, which had been mistaken by him for a tumor of the kidney.

Dr. Osler, in reply to Dr. Tyson's first question, stated that the only remnants of sarcoma tissue were two or three small, but very distinct, portions in the lower attached part of the tumor; the remainder had wholly undergone this thrombolic change, and in the upper part had become converted into a blood cyst. This change was, no doubt, slow with first a destruction of the sarcomatous elements by the blood-clot and then a slow process of necrosis. There was no evidence in any part of the tumor of an invasion of the coagulum by the sarcomatous elements, as is not infrequent in thrombi in other regions, as he had seen in the portal and renal veins. The chief interest in the specimen lies in the remarkable extent of the thrombolic change. Looking at the clinical aspect, he had diagnosticated the case as one of retro-peritoneal sarcoma from its large size, its being so centrally placed, its slight movability, its distinct separation from the liver, kidney, and spleen, not being placed more on one side than on the other, and from the fact that palpation in the lumbar region gave no pain or other evidence of kidney lesion. It was firmer above the brim of the pelvis than any other tumor he had ever examined. One remarkable feature about these tumors is their painless character; this man complained of no pain, and in two other similar growths, which he described at length, pain was not a symptom.

THE BALTIMORE ACADEMY OF MEDICINE.

STATED MEETING, Jan. 6, 1886.

Piece of Iris Living in the Vitreous Chamber.

Dr. J. J. Chisolm reported the following case: G. T. S., æt. 59, six months ago fell down a railroad embankment and received an injury to the right eye. When seen by his family physician six hours after the accident, he was suffering intensely. The lids had become very much swollen. Upon carefully separating them a wound was discovered at the upper edge of the cornea from which a thick splinter of wood was protruding. The removal of this bit of wood was accompanied by a bloody, aqueous discharge, leaving, however, so much blood in the anterior chamber as to conceal the amount of injury done to the eye contents. The treatment pursued was rest, cold applications, and the internal administration of anodynes. As the swelling subsided and the blood was absorbed, it was found that sight had been so materially impaired as to leave only perception of light. In time, however, the vision slowly improved till after three months large objects could be again recognized. In the meantime, the left good eye indicated some growing impairment of vision for distant objects and the spectacles heretofore worn with comfort, no longer permitted easy reading. This growing defect in vision in the good eye was supposed to be a sign of sympathetic complications, and for this reason the patient was sent to Dr. Chisolm from his distant home for treatment. He found the left good eye hyperopic, v. $\frac{15}{40}$ with a $+\frac{1}{20}$; his distant vision became $\frac{15}{12}$—even above normal, and he read brilliant type readily with a $+\frac{1}{8}$ lens. His spectacles were $+\frac{1}{12}$ which accounted for his discomfort. At first sight the injured right eye presented every appearance of a successful cataract extirpation.

The iridectomy was large, well shaped, centrally located, and clean to the very ciliary border. The well formed artificial pupil was black with traces of capsular deposit as is seen after successful cataract operations. He could detect large objects and count fingers readily at four feet, the distance at which I was sitting from him. In putting a $+\frac{1}{3}$ lens before his injured eye, the Doctor was surprised to find v. $\frac{15}{70}$, and with a $+\frac{1}{2}$ of $\frac{1}{8}$ lens he could make out words in brilliant type.

He complained of something moving about in his eye, which seemed to wave before his sight. By oblique illumi-

nation Dr. Chisolm saw a whitish body in the vitreous. With ophthalmoscopic illumination the examination showed a healthy fundus and clear vitreous, so as to give a perfect retinal picture.

Hanging from the roof of the vitreous chamber at some little distance behind the thin, partial capsular film, was a flap of membrane apparently one line wide and two lines in length. It was rectangular in shape and of a yellowish white color. Upon its anterior surface could be clearly traced a vessel of the same size, which starting at the base ran down through the whole length of the membrane to the free extremity of the flap. This piece of living tissue moved to and fro with the movements of the eye-ball. This floating membrane in the vitreous, adhering to the upper anterior edge of the choroid, could be nothing else but the missing piece of iris.

The splinter of wood in entering the eye through the upper scleral border of the cornea, had torn the iris in two places from the pupiliary border to the ciliary region, in this way punching a piece out of it. This detached bit of iris had been pushed back into the vitreous chamber, carrying with it a portion of its ciliary body. It remained adherent to the ciliary body at one point by a broad base.

The lens must have been injured also at the time of the accident, because through its torn capsule the aqueous humor had been brought in contact with it, to its complete disappearance by absorption. As there was a broad base to the flap with ample nourishing blood-vessels, the piece of displaced iris had continued to live. Although it had been bleached and all trace of pigment had disappeared from it, it was yet thick enough to show translucency. Under ophthalmoscopic examination, it showed boldly as a whitish yellow membrane against the healthy red reflex of the fundus. Curiously, the passage made by the splinter into the vitreous chamber had not been invaded by inflammatory deposits. The hyaline structures had taken on no pathological changes and therefore excellent vision had been retained to this curiously injured eye.

Penetrating Gunshot Wound of Heart without Fatal Result for Twenty Hours.

Dr. Edwin Michael said that on Christmas night last, about 9 o'clock, he was called to see a large, stout, well built German man, a saloon keeper by occupation, who had received a pistol wound, while engaged in quelling a disturbance in

his establishment. The ball came from a pistol of the "Bull Dog" pattern, 38 calibre, and was shot from a distance of twelve to fourteen feet in front of and a little to the patient's right.

The point of entrance of the ball was at a spot almost if not directly over the apex beat of the heart. The exact location of the perforation was three inches to the left of the median line, $1\frac{1}{2}$ inches to right of left nipple line and $\frac{3}{4}$ of an inch below a line drawn transversely through the nipple. There was of course no probing. The patient was in extreme shock. Stimulants were given and after a short time consciousness returned. By physical signs, a wound of the lower lobe of the left lung and hæmorrhage into the pleural cavity of that side was diagnosed. It was also probable that there was a co-existing pneumothorax of small degree. About 11 o'clock, two hours after the accident, the patient began to complain of much general pain. He became quiet after a hypodermic of morphia and atropia, and continued comparatively easy for a time, when pain again began to be felt, which was again arrested by a repetition of the hypodermic injection. At the end of twenty hours from the time of the accident the patient died.

The autopsy showed that the bullet had passed through the fifth rib, near its junction with the cartilage, through the pericardium, through the left ventricle, making in its passage an opening through the heart. After leaving the heart, it had penetrated and passed through the lower lobe of the left lung, fractured the eleventh rib aud imbeded itself in the soft tissues of the back about two inches to the left of the spinal column.

The doctor thought it remarkable that such a ball should have passed through the heart without causing instant death. He had seen one other case in which the heart had been perforated by a 22 calibre ball. In this case death was practically instantaneous.

In the case under consideration the wound was obliquely through the heart in such a way as to make valve-like openings in the ventricular walls, similar to the openings in the bladder through which the ureters pass. This form of perforation, he thought prevented what would have been rapid hemorrhage, into the pericardium had the openings been made in a line, perpendicular to the plane at the point of entrance of the ball. During life, there was considerable hemorrhage, but he did not think that came directly from the heart, but was forced from the pleural cavity by the

movements of the lung in respiration. The dressing consisted of cloths saturated in mercuric bichloride solution.

Dr. Chisolm referred to the rare case of perforation of the heart and retention of the bullet within its cavity until found there after death. He had seen cases of injury to the heart by bullets, but none of them had lived so long as twenty hours.

Circumcision.

Dr. A. B. Arnold read an exhaustive paper on this subject in which he treated the subject from a moral as well as from a historical and surgical standpoint. He protests against the practice because he considers it detrimental in robbing the glands of its natural protective covering and thus exposing to irritation those very sensitive Pacinian bodies about the corona. The result of this exposure and consequent irritation, he thought lead to habits of masturbation. From the religious point of view he considered it an entirely erroneous idea that a child born of a Hebrew mother was not a Hebrew until circumcision had been performed. It has recently been decided that a Jew can not be excluded from fellowship in a Jewish congregation because of the presence of a foreskin.

In answer to the question, "had any hereditary shortening of the prepuce been observed in Hebrew children as a class?" he had noticed nothing different in the formation of the foreskin in them from that of other children.

Dr. Stanley Hall was invited to make some remarks on the subject. He said, that a few years since he was in Vienna during a discussion upon the subject and it was there decided that circumcision was beneficial in lessening the erethic habit and that is was anticipating what nature would herself do if left to her own course.

Dr. John R. Uhler said that possibly circumcision had its effect upon procreation by lessening the amount of surface tissue to be filled with blood and thus allowing a greater amount of blood to be supplied to the centre of the organ. This would, he thought, have the effect of increasing the temperature of the body of the organ. Again he thought that possibly the reason for its having been first practiced in Eastern countries and especially in the tropics, was that the dry sandy atmosphere so potent in causing ophthalmia might have such an irritating effect by causing a gritty deposit beneath the foreskin.

Dr. J. Edwin Michael, said that he had been frequently called upon to remove the prepuce because of its inconve-

nience. As to affecting the sensitiveness and irritability of the glans he did not see that the operation made any difference whatever.

BALTIMORE GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY.

Regular Meeting, held *January 12th*, 1886.—The President, Dr. George W. Miltenberger, in the chair; Dr. William E. Moseley (248 N. Eutaw street), Secretary.

Two Cases ot Dystocia.

Dr. L. E. Neale read a paper on this subject, of which the following is an abstract:

Case I.—A white primipara, æt. twenty-five years, in labor at term with living child presenting left sacro-iliac anterior breech, movable above superior strait and unaccompanied by inferior extremities. Descent failing, the attending accoucheur resorted to chloroform, manual extraction, Elliot's forceps with an unsuccessful result. Another physician also tried, with the patient under chloroform (a) manual extraction, (b) to pull down a foot. Dr. Neale was called in consultation and after many trials, including the use of Tarnier's forceps, which slipped, finally succeeded in bringing down a foot and extracting an asphyxiated child, which was restored by Shultze's method; mother well.

The Doctor called attention to the use of (1) Barnes' method of decomposition, and (2) the obstetric forceps in such cases of difficult *frank* (Pinard) breech labors. He referred to Tarnier's explanation of the cause of difficulty in engagement and disengagement being due to the legs *splinting* the trunk, and thus preventing flexion of the same, and he thought that this fact might indicate the propriety of Barnes' plan of treatment. He cited several authorities, and agreed with those who considered this method difficult if not dangerous when the breech occupied the pelvic cavity, and he was of the opinion that manual extraction directly upon the breech should not be utterly ignored. Most recent authorities sanctioned the use of the forceps in *frank* breech cases, Olinier declaring that the instrument may be applied to the breech even at the pelvic brink. Lusk particularly recommended the Tarnier forceps, and Dr. Neale thought the instrument should be tried before resorting to more dangerous instrumental measures.

Case II was one of *contracted pelvis* occurring in an Irish woman, thirty years of age in labor at term with third child. Her two former labors were terminated by forceps operation, the child dying on each occasion, and in this, her third labor with child presenting vertex right occipito-iliac posterior; head movable at brim; forceps and version both repeatedly failed and the child here also died during the accouchement. Dr. Neale was then called in consultation and with great difficulty succeeded in delivering by craniotomy a ten-pound child. The puerperium was normal. The external pelvic measurements were normal; the internal conjugate was about two and three-quarters inches; the symphysis pubis was about two and one-half inches long and had an exaggerated inclination, and there was moreover, a marked thickening of the pelvic bones. The entire build of the woman was short, stout, massive and powerfully muscular, although there was no sign or history of rachitis.

Dr. Neale preferred version when practicable, to high forceps in contracted pelvis of not less than two and three-quarters inches in smallest diameter, and he cited authority in support of this view. In such cases as labor at term with living child, he would at once resort to version if practicable; if impracticable, high forceps cautiously, and failing in this, craniotomy. With dead child, presenting head at the brim, straight, he would resort to craniotomy at once. If such cases should be seen early enough, labor should be induced by Krause's method (introduction of a bougie into the uterus) about the twenty-third or twenty-fourth week of gestation, and even then, if *necessary*, deliver by version.

Dr. H. P. C. Wilson said he had nothing to offer in regard to Dr. Neale's paper except words of commendation, and he was ready to accept the teachings advanced. In his own practice, in cases of presentation of the breech demanding interference, he always brings down a foot. If the breech is engaged in the superior strait he pushes it up into the uterus and brings a foot down even if it is at the fundus uteri. He never exerts traction in the groin either with his finger or the blunt hook, and never uses forceps in such cases. With greater experience, turning grows more and more in his favor. He referred to the confinement of the wife of a friend in Copenhagen, in which case the head presented. After prolonged effort and failures with forceps the child was removed by embryotomy. He felt certain from the account he received, that, had turning been resorted to very early there would have been very fair prospects of saving the life of the child.

Dr. B. B. Browne had succeeded twice lately in delivering the child with Tarnier's forceps in difficult breech presentations, where the membranes had been ruptured several hours, the vagina hot and dry, and the breech firmly fixed in the superior strait. In a similar condition, several years ago, he had applied Elliot's forceps, and it slipped and failed to deliver the impacted breech. In all cases where the membranes are unruptured or where the breech is not firmly wedged, he would prefer bringing down the feet rather than using forceps.

In reply to a question, Dr. Browne said he applied the forceps in these cases to the sides of the pelvis of the mother and without reference to the portion of the breech upon which the blades could press.

Dr. Neale, in reply to a question, said that in the first case reported, the blades of the forceps clasped the child over its hips. He thought, however, that the forceps would have a better hold if one blade was over the sacrum and the other over the anterior aspect of the opposite thigh, which is the method recommended by Dr. Lusk.

Dr. Thomas Opie highly approved of the teachings set forth in Dr. Neale's paper. In practice he always made due effort to bring down *both* legs in displacing the impacted breech or in turning the child. The hand grasping both knees or one knee or thigh, has always a more secure hold than by a foot or even both feet, and the traction acts more directly and efficiently on the body.

Dr. Neale wished to say in regard to Dr. Wilson's remark that he "always went for a foot" in breech cases requiring interference, that he believed there were many cases in which it was practically impossible to bring a foot down, as when the breech already occupied the pelvic cavity and could not be pushed up into the uterus so as to free a foot.

Case I.—Pregnancy Complicated with Laryngeal Phthisis with Subsequent Confinement.

Dr. Thomas Opie read the history of three cases: Mrs. M., age thirty, primipara, had suffered from severe pneumonia three months prior to conception. A brother had died of phthisis at about her age. Laryngeal phthisis set in about the middle of pregnancy. At the expiration of her eighth month there was great dyspnœa—pulse 120, respiration 30, temperature 102, and severe pain in the lower lobe of the right lung. This latter symptom was imputed to mechanical causes, from the right lateral obliquity of the uterus. So ergat was the embarrassment of respiration and pain, that

the idea of artificially inducing labor was seriously entertained. On the 19th, labor pains set in at 7 P. M. The dilating stage lasted five hours. At 1 A. M., the head was low in the pelvis; the pulse 160, respiration 60—sweating profuse, countenance indicative of great fatigue. The child's movements and pulse showed it to be well and strong. The forceps were applied, and the child delivered in excellent condition. There was no laceration of the perineum, and the uterus contracted well. There was no relief to the function of respiration. The pulse continued its same rapid stroke; the dyspnœa was quite as great as ever, and death closed the scene, as if from the accumulation of carbolic acid in the blood. The child was well developed and vigorous, having drained the mother for its own support.

Dr. Opie presumed there were few supporters at present of the theory that pregnancy retards phthisis by derivation and revulsion. This case seemed one in which the disease was aggravated, if not developed, under the trials of gestation.

Case II.—A Unique Presentation—Both Hands and One Foot, with Prlapsus Funis.

Mrs. R. W. was delivered by Dr. Opie in 1884 of a still-born child at full term The os was dilated by Taylor's narrow-blade forceps, and the traction rod forceps applied above the superior strait. The head not advancing under reasonable force, and the child being dead, cranioclasty was performed. Following her confinement, the patient had severe metritis. In twelve months from her first labor, the Doctor was called to her in premature delivery of a dead child at eight months. The presentation was, in his experience, unique. Both hands and one of the feet were presenting in the os, above the superior strait, and the funis was prolapsed into the vagina. Inspection and palpation showed the shape of the abdomen, as well as the contour of the uterus, to be normal. The child was doubled upon its abdominal plane; its dorsal region corresponded with the fundus uteri, the head was on the shelf of the right iliac fossa, the ulnar surfaces of the hands, and the os calcis of the presenting foot looked towards the left iliac region. Chloroform was given to complete anæsthesia. The missing foot was found, and this and its fellow, seized with his right hand only partially introduced into the cavity of the uterus. The left hand assisted in the act of version through the abdominal wall, as in the combined, or bipolar method, introduced by Braxton Hicks. The membranes had been ruptured for three days, but no

serious difficulty was realized in turning the child. In view of the softened and yielding state of the child's tissues, it became most important that traction should have been made with both legs. The atony of the uterine walls fully compensated in turning for the disadvantage from the loss of expulsive power. When the head was extracted, the occiput was pushed up, the chin was flexed, and simultaneously pressure was made by an assistant. The position, as at first diagnosticated, could only have occurred in a dead child. Dr. Opie thinks it was originally a right occipito-iliac position. The child having lost its resiliency, first assumed, under the uterine contractions, an oblique position; and Nature, unequal to the task of delivery by the head, began the work of self-turning by the feet. The patient made rapid convalescence, uninterupted by a single abnormal symptom.

Case III.—Diagnosis of Twins—A Double Battle-door Placenta.

Mrs. B. primipara—delivered Jan. 5th of twin girls, at the end of eighth month of paegnancy. Dr. Opie was called a month before labor to examine what proved to be a hernia in the left inguinal region. An opportunity was given for a thorough exploration of the abdominal tumor. Inspection and measurement showed the transverse diameter of the uterine globe to be as long as the vertical. Auscultation revealed on the extreme right a heart sound, and a loud placenta murmur at a corresponding site on the left side. A number of small fœtal parts, not clearly distinguishable, were found, too many, and some of them too far removed from the fœtus on the right side to be imputed to that child. Twins were predicted. The placental souffle likely masked the heart sounds of the child on the left side. The first child was born after a tedious labor of twelve hours, the waters breaking in advance. The second child was born one hour later. The membranes broke when the head was dilating the vulva. The placentas were firmly united, and the cords were inserted very near the ridge, where they seemed welded together. They were so close together and so near the line of union as to give the appearance of a double battle-door placenta. Each fœtus had its own amnion and chorion, but there was a common decidua. The close union of the placentas on the left side of the uterus, coupled with the fact that both children were of the same sex, makes it highly probably that the two ova were deposited in the same fold of the decidua vera, that they came from the left ovary and were from the same Graafian vesicle.

Labor Complicated by Placenta Prævia and an Intramural Fibroid Tumor.

Dr. John Morris reported the following: On Sunday evening January 3rd, I was hurriedly summoned by Dr. William N. Hill, of this city, to a case of labor. The patient was in charge of Dr. Hill and Dr. I. I. Gross; Dr. Hill furnishes the following history of the case:

"Dr. Gross first saw her last March, which corresponds with the date of her first month of pregnancy. He discovered a tumor in the left side, which caused the patient to complain of pain, especially while standing. After rest for a couple of weeks, warm applications, the administration of narcotics and iodide of potassium, she became convalescent and progressed favorable during the remainder of her pregnancy. On Saturday, January 2nd, at 9 P. M., she was delivered, by a midwife, of a living child. Dr. Gross was called in at midnight and found the woman flooding from adherent placenta. He tamponed, gave ergot, and the hæmorrhage ceased. Owing to the contraction of the os and the partial projection of the placenta, a full examination of the interior of the womb was an impossibility, although the size and appearance of the abdomen were such as to lead Dr. Gross to the belief that there was a second child present.

"At seven A, M., Sunday, the os was closed firmly on the projecting placenta; no hæmorrhage; ergot was continued.

"I was called to assist Dr. Gross at 4 P. M., on Sunday, and found the os dilated sufficiently to admit the hand partially. Portions of placenta, not adherent, were taken away. The appearance of the womb as to size and irregularity remained unchanged, although examination by touch revealed no presenting part or membranes. Pains were slight, and at long intervals. The progress of the case afterwards, you yourself observed."

I saw the woman on Sunday evening at 6 o'clock—twenty one hours after the delivery of the child. She was a respectable, intelligent, colored woman over 40 years of age. She was quite feeble and greatly exhausted from pain, loss of sleep and anxiety of mind, as well as from the previous hæmorrhage. She was, however, patient and hopeful. Fortunately the hæmorrhage had ceased. I first examined the child, as I was very doubtful from the history given me, of the presence of a second one in the uterus. The baby was a healthy, wholesome little thing, and weighed about seven pounds. It was slightly larger than twin children usually

are. I next made an examination of the abdomen, and found a tumor or hard mass nearly the size of a small child. It was solid and unyielding to the touch. It was not symmetrical in shape, and lay chiefly on the left side of the abdomen. This tumor presented no angles or projecting points such as you would be likely to find in the case of a twin child. I then proceeded to make an examination, per vaginam, and discovered the os partially closed, and the placenta adherent on the left side of the cervix and anterior portion of the womb. I found great difficulty in passing the hand, and consequently determined to administer an anæsthetic. She came readily under the influence of chloroform; I introduced my hand; broke up the attachments of the placenta, and removed it *en masse*. I then made an exploration of the uterus, and found as I anticipated, a large tumor. It was an intra-mural fibroid, and filled up the posterior and left lateral wall of the uterus. It terminated in a small pedicle, or tumor, the size of a walnut which, covered by the mucous membrane, projected into the uterus. The continued use of ergot had produced violent contractions, and pressed the tumor tensely upon the placenta, thus deceiving the gentlemen in attendance as to the true character of the mass felt by abdominal examination.

This case presents some very singular features. The fact that a woman over 40 years of age, suffering from a fibroid tumor, filling up the greater portion of the uterus, was pregnant, is in itself, I think, an unusual circumstance. The attachment of the placenta to the cervix thus occasioning a partial placenta prævia, was no doubt, due to the law of selection, inasmuch as the fundus did not afford a proper nutrient matrix for the support of the child. I would here remark, *en passant*, that the woman had not been pregnant for twelve years. Her pregnancy in this instance was no doubt due to the accident of the ovum, which came possibly from the left ovary finding a nidus in the healthy cervix. The case taken altogether is a profitable one and may possibly prove of service to all engaged in it. I had not met a similar one in an experience of forty years.

Dr. B. B. Browne remarked that about ten years ago he had had a somewhat similar experience, the patient also being a colored woman. He was called to a case, which had been attended by a midwife, about twelve hours after the delivery of one child to delivering the other, which the midwife said was fast and could not come away. Upon examination a sub-peritoneal tumor as large as a fœtal head at full term

was found. The tumor had attained this large size during the period of pregnancy. With involution of the uterus the tumor decreased rapidly in size, and at the end of six weeks could scarcely be detected. This case was reported in the *American Journal of Obstetrics, Vol. X, p.* 39.

Dr. Morris asked Dr. Miltenberger's opinion as to the theory advanced in the paper, that the ovum had by a law of selection attached itself to the cervix, not finding a proper nutrient *nidus* in the body of the uterus.

Dr. Miltenberger thought the theory a very plausible one.

Dr. T. A. Ashby asked Dr. Morris whether menstruation had occurred during pregnancy in the case which he had related. Several cases had been reported in journal literature, where menstruation had continued during pregnancy, and the explanation offered was based upon the discovery of polypi and sub-mucous fibroids in the uterus. In the classical case reported some years ago by Dr. L. M. Yale, menstruation was observed in a pregnant woman, and upon examination a very small polypus was found and removed, and hæmorrhage did not again occur during the pregnancy. Dr. Ashby was of the opinion that the explanation offered by Dr. Morris to account for the position of the placenta was a most rational one. The presence of the tumor had no doubt prevented the ovum from becoming engrafted upon the mucous membrane covering it; and as the tissues about the cervix were in a healthy condition, a favorable site was offered for the development of the decidua and the growth of the ovum.

The Doctor then related the history of a case which he had attended about a year ago. He was first called to see the patient during labor and learned that she was over five months advanced in pregnancy. For two weeks she had been losing large quantities of blood, but this circumstance had not attracted serious attention until labor pains set in. On examination he found the placenta firmly attached to the right side of the cervix, but a large portion which lapped over the internal os had become detached. Hæmorrhage had resulted from this detatchment and the copious loss of blood had destroyed the life of the fœtus, which had evidently been dead for several days. The breech presented and after some delay in dilating the cervix delivery took place. The placenta being firmly adherent was detached with some difficulty. The patient made an uninterrupted recovery. Dr. Ashby considered that the occurrence of the abortion had proven a conservative process, as the full development

of the child would doubtless have led to more serious complications. In this case there was no evidence of a fibroid tumor, but impregnation had followed pretty closely upon the birth of a child which may have accounted for the occurrence of a placenta prævia.

Dr. Miltenberger said he thought that the presence of an intramural fibroid would not, as a rule, cause hæmorrhage during pregnancy although polypi are very apt to do so.

Dr. Browne asked Dr. Miltenberger if it was not his experience that fibroid tumors increased very rapidly during pregnancy.

Dr. Miltenberger replied that, at the moment, he remembered three cases of pregnancy complicated by fibroid tumors. In two of these there was marked increase in the size of the growth during gestation and rapid disappearance after confinement. Both occurred in young women.

Dr. W. P. Churm thought that hæmorrhage might be caused by the unequal contraction of different portions of the uterus, due to the presence of the tumor, which might also, to some extent, have prevented the expulsion of the placenta. Dr. Emmet had related a case in which alarming hæmorrhage followed the extraction of a sub-mucous fibroid and was only checked after a second tumor, which was found in the parenchyma, was removed.

Dr. Robert T. Wilson referred to a patient of his who told him that the only time she menstruated or had any bloody discharge from her uterus was during pregnancy, but that during that period the flow appeared regularly each month ceasing after labor had taken place. His patient was a white woman and had no fibroid tumor.

Dr. Morris believed that hæmorrhages during pregnancy did not result from intra-mural fibroids. As regards the prognosis in these cases, he felt safe in telling the friend that the tumor would disappear.

Dr. Browne remarked that the existence of fibroid tumors in the uterus was a recognized cause of sterility; but when pregnancy does occur in such cases, the tumors increase rapidly in size with the development of the uterus. After delivery, with involution of the uterus, the growths quickly diminish in size and frequently disappear altogether.

Dr. Neale referred to two cases, the history of which he had read before the Maryland Medical and Chirurgical Faculty.

Case I.—Mrs. A. P., æt. 28, was delivered of her fourth child after a perfectly normal and easy labor. A teaspoon-

ful of fluid extract of ergot was given post-partum, but a considerable bloody discharge with severe after pains continued for twelve hours, when the patient expelled from her uterus a fibroid tumor which the Doctor preserved. Its presence had not been suspected.

Case II.—Mrs. M., American, æt. 20, was delivered with forceps after a difficult and tedious labor. The uterus, after expulsion of the placenta, although firmly contracted, would not descend below the umbilicus. Both Dr. Miltenberger and Dr. Neale made careful vaginal examinations and diagnosticated a fibroid tumor, apparently about the size of a man's fist, in the posterior uterine wall. Nothing of special note occurred until the eighth day, when the patient passed from her uterus a fleshy mass described by the nurse as being "like a miscarriage and resembling in consistence the gizzard of a chicken." It was thrown away by the nurse, but both physicians considered the case analagous to Case I.

Dr. Neale considered these cases especially interesting as occurring in young white women, and thought the fact of spontaneous post-partum expulsion might have some bearing upon the treatment and prognosis.

Dr. Morris referred to a patient of his, who, about *eight days after each of her confinements, had passed a fleshy tumor* from her uterus. Dr. Miltenberger had kindly attended this patient, in one of her labors, for Dr. Morris and had had an opportunity to examine one of these tumors. Dr. Morris has seen notices of similar cases in foreign text books, but has never seen them in our own.

"Weally, ah, I beg your pardon, miss, if I intrude," said a dude from Cincinnati, the other evening, on discovering a pretty girl milking a cow.

"No intrusion, sir," said the girl, blushing like a rose.

"Ah, my dear damsel, cawn't I assist you?"

"Certainly, sir; just stand where the cow can see you."

"Of course I will, me chawmer; but what do you want the cow to see me foah?"

"She will think you're a calf, and give down her milk faster."

Analyses, Selections, etc.

Toxic Properties of Sassafras—Narcotic, Convulsive, Abortifacient and Antidotal to Venomous Stings, etc.

In connection with the paper in our January number, 1886, by Dr. Thomas J. Miller, on "Therapeutics of Oil of Sassafras," we are sure our readers will be interested in the paper by Dr. John Bartlett, of Chicago, in *The Chicago Medical Journal and Examiner* for December, 1885, entitled "Remarks on the Toxic properties of Sassafras." His "remarks" attribute other important properties to sassafras oil not alluded to by Dr. Miller.

Sassafras was discovered in Florida by the Spaniards and named by the French in 1562. It was used by them in association with other native herbs as a remedy for malarial diseases. For years past, though occasionally prescribed in combination in rheumatism and syphilis, and regarded as possessing diuretic, diaphoretic and tonic properties, it had come to be looked upon as but little efficient. So that such books as Motherby, 1785, Parr, 1809, Eberle, Trousseau, Mitchell, Warring, Stillé, Ringer, Bartholow, Phillips, Wood, Fluckeger, Farquharson, Brunton, Wormly and Blyth, and the U. S. Dispensatory, National Dispensatory, Christison's and King's Dispensatory, do not mention the possession by sassafras of any decided therapeutical or noxious power.

More than twenty years ago Dr. Thompson, of Tennessee, stated that sassafras was an antidote to henbane and tobacco; and later, in 1870, Dr. Lyle, of Indiana, declared that he had used the oil of sassafras in a case of stramonium poisoning with the happiest results. Dr. Lyle affirmed that sassafras had power to destroy all insect life, and was an effectual antidote to the venom of the copperhead snake. In 1883 Dr. Hinton claimed that sassafras tea was almost a specific for the rash produced by poison oak.

Recently paragraphs have appeared in the medical journals, in which it is stated that sassafras is not the innocent agent that it has been supposed to be, but that in reality it has violent toxic properties. This statement is made upon the authority of Dr. Charles L. Hill, from whose paper, read before the 86th session of the Medical and Chirurgical Faculty of the State of Maryland, in April, 1884, the following report is extracted. He says:

"A case of poisoning by the oil of sassafras, that once came within my knowledge, proved that it possesses far more active properties than is generally supposed, and I have been able to demonstrate by experiment on the lower animals that, instead of being a harmless, inert drug, it is a strong nervous sedative, anodyne and soporific, and in over-doses, a dangerous narcotic poison. A policeman, attracted by the sound of a falling window and other suspicious noises proceeding from a gentleman's office, entered the room to ascertain the cause. He found no one present but a boy, who was lying unconscious on the floor. He took him at once to the station-house, where I saw him shortly afterward. The officers had already diagnosed his case as one of opium-poisoning, and were vigorously striving to keep him awake by walking, flogging and other means usually resorted to in these emergencies. His stupor was profound, and he no longer made an attempt to walk, but was literally dragged about in their efforts to revive him. He spoke occasionally, but only to beg them to allow him to sleep. He was in a condition of great relaxation; skin covered with a profuse perspiration; countenance pallid; pulse rapid, but weak and thready. His pupils were *normal*, and there was a strong odor of sassafras in his breath. As quickly as possible an emetic was administered, which produced a copious emesis, redolent with the odor of sassafras, with drops of the undissolved oil floating in the liquid. This was followed by free draughts of warm water, until only a faint odor of sassafras was discoverable. The vomiting relieved him and he was soon restored to consciousness. He felt no discomfort except a sense of weakness and exhaustion, and was soon able to give the following account of himself:

"His employer having gone home, he was preparing to close up the office, when he espied a bottle of the oil of sassafras which had been left on the desk. Remembering that sassafras had been recommended for the removal of an eruption that disfigured his face, he thought this a good opportunity for giving it a trial, and turning up the bottle—to use his own language—he took two large swallows of its contents. In a few minutes he began to feel very *stiff*, as he expressed it, but proceeded to close up the shutters preparatory to leaving for home. He raised the window for this purpose, but had not strength to hold it in this position, and it dropped from his grasp, and at the same time he fell to the floor unconscious.

"This suggestive case led me to make numerous experi-

ments on the lower animals with very interesting results. Ten drops of the oil were injected hypodermically under the skin of a mouse. The animal quickly succumbed and died convulsed. By repeated experiments I was able so to regulate the dose as to get the characteristic effects of the drug without causing the speedy death of the mouse. A glass rod was dipped into the oil and held in front of the mouse, and he seized it with his mouth. This was repeated at intervals of a few minutes, until a sufficient quantity was taken to produce the desired effect. The first symptoms observed when a small quantity was thus taken, was a slight convulsive movement, which was repeated at intervals of a few seconds, and agitated the animal's body very much like a severe hiccough. This gradually increased in severity; the movements became more unsteady, the body more arched, and the limbs so stiff that the mouse stood on tiptoe. It was noted that the one idea of escaping from the trap still predominated over all else, as he continued to climb up on the bars of the cage, only to fall on his side or back at each convulsion, until no longer able to rise.

"I have repeated these experiments many times with great uniformity of result. Sometimes they [mice] would dance about for half an hour, with a peculiar convulsive movement that would jerk the head and front feet from the table. Again they would fall on their side with each convulsion and regain their feet immediately, only to repeat the same movement.

"With cats and dogs, the result was somewhat different. A drachm under the skin of a cat caused such profound insensibility that she was supposed to be dead, and thrown away, but it seems that only one of the reputed nine lives of the animal had been reached, as the next day she turned up none the worse for the experiment. A full-grown dog was paralyzed in his hind legs by a similar dose hypodermically over the loins, but it recovered."

"There is one other property possessed by this drug that is worthy of mention—it is a *germicide and anti-ferment* of no mean quality. In some clumsy experiments made by myself, I have estimated its potency in this field as about one-half the strength of carbolic acid. It has long been used as a domestic remedy for the destruction of lice and other vermin."

For some years past Dr. Bartlett has had an intention of bringing before the profession reasons, rather feeble it must be admitted, for the supposition that the medicine under con-

sideration has marked potency in a direction, so far as he knows, not suspected by medical men. Up to this time the declaration on the part of standard writers that sassafras is a remedy of questionable power, and the fact that it is hawked about the streets and used freely as a tea all over the country, have caused him to refrain from bringing before a scientific body his limited experience presently to be detailed. But the recent declaration that this drug possesses toxic properties may justify the following statement:

Years ago, Dr. Bartlett was called to a woman among the poorer classes, of good intelligence and education, who was having a miscarriage. Upon inquiring as to the cause of the mishap, with a prefatory reference to her poverty and already large family, she stated that she induced the abortion herself —that she had done so on previous occasions. She had employed, she said, "what other women used," sassafras tea. She was surprised that the Doctor did not know of the properties of *sassafras as an oxytoxic*. She spoke as if all her friends knew how to use it as an ecbolic, and she evidently looked upon it as a specific. Tea, she said, made from four or five pieces of the root, as large as the thumb and twice as long, would produce abortive effect.

A year or two later Dr. Bartlett was called to a woman two months pregnant. For several days she had had symptoms of miscarriage of so profound a character that arrest of the process was doubtful. The patient was very anxious to have a child; she disclaimed the intention of inducing abortion, and to all inquiries as to a possible cause of the hæmorrhage, she gave answers which left room for no further question except this: "Have you been drinking sassafras tea?" Surprised, she replied that for a week past she had used it at breakfast and supper. The proper remedies for her condition were prescribed, the possibly offending tea left off, and in twenty-four hours all was quiet in utero. Farther than this the Doctor's experience with sassafras as a possible abortifacient does not extend.

A study of the toxic effects of sassafras as reported by Dr. Hill, and here suggested, would seem to show a tripple resemblance to three familiar articles, opium, strychnine and ergot. In its action as a narcotic and sudorific it resembles opium. In its property of inducing tetanic and clonic spasms, followed by paralysis, it is similar to strychnine. In its power hinted at of exciting the uterus, it may be likened to ergot.

It may be of interest here to call attention to the fact that

the first reference to the use of ergot as an ecbolic was made by Stearns in 1807, whereas it had been used by midwives certainly as early as 1688, and probably very much earlier.

Impunity of Opening Knee-Joint.

Dr. Henry B. Sands, Professor of Practice of Surgery in the College of Physicians and Surgeons, of New York city, read an instructive paper December 8th, 1885, before the New York Surgical Society on "Rupture of the Ligamentum Patellæ, and Its Treatment by Operation," which is published in the *Medical News* of December 16th. After advocating the suturing of the ruptured ends of the ligament, he incidentally mentions cases where, during the operation, the cavity of the knee-joint has been boldly laid open in order to remove from it any *debris* or accumulations of fluid, without injury resulting in the process of repair; but he attaches great importance to the value of antiseptics in the treatment of knee-joint wounds. He concludes his article as follows:

That which has most interested and gratified me in this and in several other severe operations I have performed, in which the knee-joint has been involved, is the impunity with which this articulation may be opened, and indeed somewhat roughly handled, provided antiseptic precautions are scrupulously observed. This fact was especially forced upon my attention in a case of old fracture of the patella, in which I wired the fragments, one year ago, in the Roosevelt Hospital. The operation was performed in the usual manner, but the fracture was found to have been comminuted, and the fragments could not be brought into apposition without much difficulty, nor until the quadriceps muscle had been extensively and repeatedly cut, in order to obtain the necessary elongation. Meanwhile, the bleeding was free, the knee-joint was frequently sponged out and irrigated, and the operation was prolonged, as well as severe; yet the patient recovered without an unpleasant symptom, under the use of a single dressing; and when this was removed, at the end of eight weeks, I discovered that the wound had healed throughout by the first intention, and that neither suppuration nor adhesive inflammation had taken place within the joint, which had a limited range of motion. Such a case affords, according to my judgment, indubitable proof of the marvellous improvement in operative surgery which have been wrought by antiseptic methods; and, when I see it stated in a standard American text-book, published only

three months ago, that "the alleged superiority of the antiseptic method cannot be said to have been as yet demonstrated," I am amazed at the author's incredulity. Even among those who practise antiseptic surgery, however, some hesitation is occasionally felt about opening the larger joints, and operations involving the healthy knee-joint are at present regarded by many with the same kind of apprehension which, not a great many years ago, deterred surgeons from invading the peritoneal sac. The latter procedure is, as we now know, reasonably safe, and I cannot doubt that the operation of opening the knee-joint is already, when properly performed, far safer. I confidently anticipate the time when skillful and careful surgeons will be able to divest it of all danger either to life or limb; and, whenever this period arrives, our time-honored, but clumsy, tedious, and uncertain method of treating both fracture of the patella and rupture of its ligamentous attachments may well be abandoned in favor of some form of operation calculated to secure an immediate union of the divided parts.

Flexion of the Thigh with the Leg in the Straight Position for Sciatica—Nerve-Stretching—Billroth's Method.

Dr. Albert B. Strong, of Chicago, Ill., in the December number, 1885, of the *Peoria Medical Monthly*, tells of a laborer 55 years old, generally healthy, who suffered acutely from sciatica of the right nerve. Seven years previously he was confined to his house for eight weeks by a like attack. In the late attack the pain was constant and extended down the back of the thigh as far as the toes, as also in the region of the groin. It was especially intense in the calf of the leg —as if a dog were tearing the muscles from the bone. The great and adjoining toes were numb. Dr. Strong made the patient lie out on his back on the bed. He then grasped the right ankle with one hand and the front of the knee with the other—thus keeping the entire extremity straight—and gradually flexed the thigh to a right angle with the body. This caused excruciating pain, especially about the point of exit of the nerve from the pelvis and to the calf of the leg. The limb was held in this position for about five minutes, when the pain gradually disappeared. On lowering the leg the patient instantly remarked that it felt much better—that for three weeks he had not been able to let the calf rest on the bed as long as it was then doing. He was then requested to walk about. He began to do so in a stiff sort of a way; but finding the pain was gone, he completed the rest of the

exercise in a surprising manner. In a few minutes, he walked nearly as well as ever, and was entirely free from pain. Dr. Strong again went through the same manipulation, but this time produced but little pain. The Doctor saw him again on the third day, when his only complaint was numbness of the great and adjoining toes, but he walked with perfect freedom and without pain. The special value of this simple plan of "sciatic nerve-stretching" is that it requires no cutting operation, is easily performed, and is as effective as it is possible to expect from an operation.

Treatment of Intestinal Obstruction by the Force-Pump.

Dr. H. Illoway, of Cincinnati, in a paper in the January number, 1886, of *The American Journal of the Medical Sciences*, advocates the employment of enemata administered with sufficient penetrating power to pass beyond the ileo-cœcal valve and into the small intestines, and to produce peristaltic action. He advocates the use of the force-pump, and claims, (1), that enemata thus administered are superior to every other method of treatment in the rapidity with which they either relieve the symptoms, or clearly indicate the necessity of surgical interference; (2), that they are entirely free from all danger, and in no way prejudice the case should a surgical operation become necessary.

Mineral Earth.

Dr. A. Lively, of Yardley, Pa., in the November number, 1885, of the *Medical Summary*, extols "Mineral Earth" as a local application for many diseased conditions. When we have a hideous blotched face made of eczema, herpes, with intervening inflammation, make a salve of this "Earth," by rubbing it up with [cosmoline or] vaseline, and apply all over the face. It cleared up a young man's face in double quick. Instead of filling up old ulcers or sores on the skins with elemi cerate, as was the advice of Professor Mutter, it is only necessary to fill them up with a paste of the "Earth" made up with water. Two interesting little pamphlets will be sent upon application, giving its properties, analysis (instructions), for use, etc. This mineral earth has helped him cure several cases within the last three months, which were dragging their slow course along. It is reducing a hard (stony) scirrhus growth of the glands of the axilla. He does not hope for a cure, but believes it will certainly keep it in abeyance, and the woman is delighted with the remedy. He knows nothing that could take its place, or give equal satisfaction.

Book Notices.

Treatise on Nervous Diseases: Their Symptoms and Treatment. By SAMUEL G. WEBBER, M. D., Clinical Instructor in Medical Diseases, Harvard Medical School, etc, New York. D. Appleton & Co.; 1885. Cloth, 8vo. Pp. 415. (For sale by West, Johnston & Co., Richmond).

The purpose of this book is to serve as a strictly practical guide-book to the general practitioner, so as to enable him to readily diagnose a given case and to apply an approved plan of treatment. The author does not venture much out of beaten paths, and we have to confess that the work is not exactly such an one as we would have thought a Harvard Professor would have issued. We have seen better descriptions, for example, of epilepsy in briefer space, and a much wider range of well approved therapeutic agents suggested from which to select, provided the bromide plan (which, of course, he specially recommends,) does not avail. We would not be understood as saying aught against the advices so far as given—they seem to be proper and well authorized so far as we have examined special chapters; but there is a sort of unsatisfactory looseness of style in compiling the work which gives it the general effect of carelessness of arrangement—as if items were simply jotted down at random as they occurred to the author in casual composition.

Insomnia, and Other Disorders of Sleep. By HENRY B. LYMAN, A. M., M. D., Professor of Physiology, and of Diseases of the Nervous System in Rush Medical College, etc. Chicago: W. T. Keener. 1885. Cloth. 12mo. Pp. 239. (From Publisher).

If this book has no *practical* value to the practitioner, it would prove entertaining and suggestive reading to any physical or psychical student. But possessing the merit of being both practical and entertaining, this work will become popular as soon as its character is made generally known to the profession. Be as accurate as one can be in recording all the observable phenomena of sleep, in the effort to explain them we are compelled to encroach upon much which must of necessity remain as speculative until the end of time. Our space permits us only to name the headings of chapters so as to give an insight as to the scope of the work before us: Chapter I is on Insomnia or Wakefulness. The serious consequences of insomnia are first mentioned in Chapter III, and

then the remedial agents are named. In Chapter IV the treatment of insomnia in particular diseases is considered. Chapters V and VI on Dreams and Somnambulism possess the interest of a romance. Chapter VII is devoted to artificial somnambulism or hypnotism. We advise all our readers to get this book. The publisher has done his part well, and we hope to hear from him often.

Text-Book of Medical Physics. By JOHN C. DRAPER, M. D., LL. D., Professor of Chemistry and Physics in Medical Department of the University of New York, etc. With 377 Illustrations. Philadelphia: Lea Brothers & Co. 1885. Cloth. 8vo. Pp. 733. (From Publishers.)

"This work," Dr. Draper tells us in his Preface, "aims to impart a knowledge of the relations existing between Physics and Medicine in the latest state of development." It is exceedingly painful to witness the want of elementary education in physics on the part of many who graduate in medicine. The book before us contains a well-graded course of instruction on the subjects of which it treats; and since, in the present day, so few who enter upon medical studies manifest the slightest acquaintance with physics, and receive no systematic course of instruction in this department while at medical colleges, we trust that the pride at least of post-graduates will persuade them to utilize some of their idle hours in informing themselves on the subject by attentively reading this book. It is admirably adapted to the wants of such a student.

Milk Analysis and Infant Feeding. By ARTHUR V. MEIGS M. D., Physician to the Pennsylvania Hospital, and to Children's Hospital. Philadelphia: P. Blakiston, Son & Co. 1885. Cloth. 12mo. Pp. 102. Price, $1. (For sale by West, Johnston & Co., Richmond.)

Unlike most monographs on this subject, this one is intended for the earnest student of the science of medicine, and not for the general public. To account for the contrariety of views in the profession as to the value of human milk for the infant, the Doctor calls attention to the differences of opinion as to the composition of this secretion. He is convinced that a material source of error lies in the common over-estimate of the quantity of caseine that is attributed to it. As of practical importance to physicians, he details, on pages 74–5, the food he considers best for hand-fed infants. On page 88 he gives directions for preparing food for children of nine months and older. No physician can attentively read this book without feeling that he has benefited himself.

Practical Therapeutics—a Compendium of Selected Formulæ and Practical Hints on Treatment. By EDWARD J. BERMINGHAM, A. M., M. D., Editor of "An Encyclopædic Index of Medicine and Surgery," etc. New York: J. R. Bermingham. 1885. Cloth. 8vo. Pp. 420. (From Publisher.)

A part of the title above given tells what this book is:—"Selected formulæ and practical hints on treatment" of a great number of diseases and disorders. The formulæ are quite systematically arranged as to each special disease, and these are well indexed—both as to the remedial agents recommended, and the diseases for which they are intended. The text is interleaved—thus making a sort of "give and take" work of it. It was a good idea to have such a book interleaved, allowing the owner to pencil down opposite the disease he may be studying any practical suggestions that may occur to him, or to record any prescription he may pick up from conversations, readings, or studies. The full index makes it also a ready reference book. This work should be kept upon the doctor's office-table, where it is handy, rather than have it stored away on the library-shelf.

Practical Treatise on the Diseases of Children. By ALFRED VOGEL, M. D., Professor of Clinical Medicine in the University of Dorpat, Russia. Translated and Edited by H. RAPHAEL, M. D., Physician to the Eastern Dispensary for Diseases of Children, etc. New York. Third American from Eighth German Edition. Revised and Enlarged. Illustrated by six Lithographic Plates. New York: D. Appleton & Co. 1885. Cloth. 8vo. Pp. 637. Price, $4.50. (For sale by West, Johnston & Co., Richmond).

While there are evidently some slight changes in the types of a few of the diseases peculiar to childhood as they appear in Russia and America, these are so slight as not to render a good text-book on children's diseases in Russia, a good text-book as well for the American practice. Vogel's *Treatise* is an eminently practical and valuable work—made the more valuable by candid expressions as to his clinical experience, whether unfavorable to the author or not. Dr. Raphael has added notes throughout, as well as a chapter on cerebro-spinal meningitis, which brings the book fully up to the wants of American doctors, so far as the present stage of medical science can supply them. Dr. Vogel discusses his subject almost exclusively from the utilitarian point of view—having apparently no fondness for that kind of theoretical study which brings no practical result. It disparages no book yet published to say that this work is equal to the best for the family physician. We place it in the front rank. Where-

ever practitioners can afford to have more than one or two standard works on the diseases of children, by all means, if he has not already selected this as his preference, let him make this his second or third choice at furthest. It is excellent in description, diagnosis and therapeutics.

Management of Labor and the Lying-in Period. By HENRY G. LANDIS, A. M., M. D., Professor of Obstetrics and Diseases of Women in Starling Medical College, etc. Philadelphia: Lea Brothers & Co. 1885. Cloth. 12mo. Pp. 334. (From Publishers).

This is a good appendix-sort of book to any standard work on obstetrics, and aims to be "a guide for the young practitioner." So many such books are now-a-days published, each of about equal value, that we, candidly speaking, do not see the need of any more of the like. However, this book shows the author to be an attentive student of the wants of those doctors recently entered upon the professional duty, and in the pages of this guide-book they will find many useful items of instruction. Very few illustrations are inserted to lighten the text. The publishers' editor has not shown his usual care in paragraphing the manuscript before going into the printer's hands. So far as we know, Dr. Landis is entitled to whatever of credit is due for introducing the verb "to Credè." "We speak of Burking a man; so that there is a precedent for so convenient a term as Credè-ing the placenta." He has not, however, got down to "cocaining" fissured nipples, etc.

Epitome of Diseases of the Skin. By LOUIS A. DUHRING, M. D. Professor of Skin Diseases in University of Pennsylvania, etc. Reported by HENRY WILE, M. D., Clinical Assistant in the Department of Skin Diseases in University Hospital. Philadelphia: J. B. Lippincott & Co. 1886. Cloth. 16mo. Pp. 130. Price 60 cents. (From Publishers.)

This "Epitome" consists of an abstract of a course of sixteen lectures delivered before the graduating class in the University of Pennsylvania during the session of 1883–4. It presents the subjects in an unusually simple, concise and practical form. While, in the main, we disapprove of the publishing for general use of epitomized lectures, etc., we are compelled to make an exception in this instance, because the author has the happy faculty in fully describing a condition very concisely. The lectures appeared about a year ago in the columns of the *Medical News*. The book, as now presented, is cheap at 60 cents—the price named by its publishers.

Minor Surgical Gynæcology. By PAUL F. MUNDÉ, M. D., Professor of Gynæcology at the New York Polyclinic and at Dartmouth College, etc. Second Edition. Revised and Enlarged. With 321 Illustrations. New York: William Wood & Co. 1885. Cloth. 8vo. Pp. 552. (From Publishers).

No better author for a book on such a subject could have been selected. His opportunities to learn and his ability alike give him peculiar rights to teach. When the first edition of this book was published in 1880 as a part of the series of Wood's Standard Authors, we thought it good enough. But in its thoroughly revised form, as at present before us, it is to be regarded as a work of inestimable value to every practitioner who undertakes gynæcological work at all. Our want of space does not permit us to point out its special merits in regard to any one topic; but our readers who depend upon our judgment as to whether or not to buy a book, have our unreserved opinion that this is the very book they have been wanting for a long time. The title properly expresses the scope of the work. It is "a treatise on uterine diagnosis and the lesser technicalities of gynæcological practice, including general rules for gynæcological operations and the operations for lacerated cervix and perineum, and prolapsus of uterus and vagina, for the use of the advanced student and general practitioner.

Pedigree of Diseases, Being Six Lectures on Temperament, Idiosyncrasy and Diathesis. By JONATHAN HUTCHINSON, F. R. S., late Professor of Surgery and Pathology in the Royal College of Surgeons, etc. New York: William Wood & Co. 1885. Cloth. 8vo. Pp. 113. (From Publishers).

With few emendations, these are the lectures delivered by the author in the Theatre of the Royal College of Surgeons, 1881, and which were published in one of the English medical journals at the time. Although familiar with the rank and ability of Mr. Hutchinson, we confess that the title so prejudiced us against the volume that we undertook to examine it as one undertakes a task. But we had not finished the first lecture—chiefly on temperament and diathesis—before our interest in the book became so developed that we did not lay it down until we had completed reading the last line. This is a book that every medical man ought to read carefully, for it is not only full of suggestive value, but it imparts direct information. Idiosyncracies in general, and as to particular articles of food and medicine, and as to par-

ticular diseases, etc., are dwelt upon; then certain laws of hereditary tendencies are given, as recognized by experience and observation, which are very valuable. Indeed, the entire book is profitable and instructive reading for any scientific person.

Practical Treatise on Nasal Catarrh, and Allied Diseases. By BEVERLEY ROBINSON, A. M., M. D. (Paris), Clinical Professor of Medicine at Bellevue Hospital Medical College, etc. Second Edition. Revised and Enlarged. With 152 Wood Engravings. New York: William Wood & Co. 1885. Cloth. 8vo. Pp. 276. (From Publishers).

This edition is a great improvement over the first, containing five additional chapters relating to diseases which often "exist concomitantly with a catarrhal condition of the nasal mucous membrane." These troubles are aural complications, deflections of the nasal septum and bony obstructions of the nasal passages, ulcerous coryza, adenoid vegetations at the vault of the pharynx, and mucous nasal polypi. The book is written mostly from a clinical standpoint, and serves well as a practitioner's and a student's text-book. For the most part, however, it will be especially prized by specialists, since the day is about at hand when the treatment of diseases of the nose requiring the use of instruments or manual dexterity is being consigned almost as exclusively to rhinologists, as surgical work upon the teeth is being remitted to dentists.

Text-Book of Pharmacology, Therapeutics and Materia Medica. By T. LANDER BRUNTON, M. D., D. Sc., F. R. S., F. R. C. P., Examiner in Materia Medica in University of London, in Victoria University, and in Royal College of Physicians, London, etc. *Adapted to the United States Pharmacopœia.* By FRANCIS H. WILLIAMS, M. D., Boston, Mass. Philadelphia: Lea Brothers & Co. 1885. Sheep. 8vo. Pp. 1,035. Price, Sheep, $6.50; Cloth, $5.50. (For sale by West, Johnston & Co., Richmond).

If one were to judge Dr. Brunton alone by the statements in his Preface, he would probably come to the conclusion that he was a man wanting in decision of purpose, for he has delayed the issue of the present volume for fifteen years after promising it, and during this period he has changed his plans and destroyed a whole book of manuscripts designed for this issue. This is one of the few standard books regarding which we cannot raise complaint for lack of index, for the index covers over one hundred pages. As to the merits of the work, they are well defined. It is divided into six sec-

tions. Section I contains twenty chapters, and occupies some 400 pages on "General Pharmacology and Therapeutics." In this section such matters as the circumstances which affect the action of drugs on the organism—on muscle, nerves, spinal cord and brain, special senses, respiration etc., are considered, with chapters thrown in on administration of drugs, antidotes, dorsage, etc. Section II covers about twenty-five pages on "General Pharmacy." Seven chapters of nearly ninety pages compose Section III, on "Inorganic Materia Medica." Two chapters of over fifty pages make up Section IV, on "Organic Materia Medica." Section V, of seven chapters, of about 215 pages, is devoted to articles of the "Vegetable Materia Medica." Chapter xxxviii makes up Section VI, on articles of the "Animal Kingdom," and completes the book. Throughout the work, that which is to serve the practical needs of the physician has been constantly kept in view—remitting to the pharmacist his part of the work in the selection and preparations of the crude drugs. Dr. Brunton, however, recognizing the frequent necessity of the doctor to direct the preparation of infusions, has given directions as to making them. The individual drug is almost invariably studied under the following headings: Name, etc., characters, physiological action, therapeutics and doses. It is a very valuable book for the practitioner, written by an able and eminent author.

Acne: Its Etiology, Pathology and Treatment. By L. DUNCAN BULKLEY, A. M., M. D., Physician to the New York Skin and Cancer Hospital, etc. New York and London: G. P. Putnam's Sons. 1885. Cloth. 8vo. Pp. 280. Price, $2.00. (For sale by West, Johnston & Co., Richmond).

This is a practical treatise based on the study of 1,500 cases of sebaceous diseases, which have come under the author's personal observation. In one or another of its forms, it has seemed to us that acne is as frequently met with as eczema, although the statistics of hospitals and dispensaries do not warrant such an assertion. But the disease is so much less torturing to the patient than many other rarer diseases that it is probable the case-book of any physician would record but few cases. Generally speaking, cases of acne are those for which most of the "curbstone prescribing" is done, and hence the impossibility of securing reliable statistics as to frequency. It would be about as difficult to secure relative statistics of warts on the hand or corns on the feet. And yet for these troubles, there are many obstinate cases

that require the doctor's attention. To enable the physician to deal intelligently and satisfactorily with such cases, there is no book we could more confidently recommend than "Bulkley on Acne," out of which to gain correct practical information.

Science and Art of Midwifery. By WILLIAM THOMPSON LUSK, A. M., M. D,, Professor of Obstetrics and Diseases of Women and Children, Bellevue Hospital Medical College, etc. New Edition. Revised and Enlarged. With Numerous Illustrations. New York: D. Appleton & Co. 1885. Cloth. 8vo. Pp. 763. Price, $5. (For sale by West, Johnston & Co., Richmond).

It is a great achievement to write up so thoroughly the *science and art* of midwifery in a book of this size—especially when it is noted that about seventy or seventy-five pages are taken up with cuts, and the text itself is printed with fair-sized, clear type, and suitably leaded; and yet Dr. Lusk has admirably succeeded, giving to each chapter a sufficient prominence. His language does not strike the casual reader as being specially terse, but a closer analysis shows that it is. Dr. Lusk takes advantage of the power of illustrations. Many of his well-designed or aptly-selected figures saves many more pages of text that could not so well have given an accurate idea of what is sought to be taught. He lays great stress upon the lessons inculcated by Lister, and attributes to them the great improvement in the mortality and sick-tables of lying-in women. The author has written his book with great care, everywhere showing precision in his studies and teachings. He has hesitated to mention some of the most recent suggestions that have come out in the journals which suggest themselves as an advance, while he has held fast to those established facts beyond which the knowledge of man cannot go. He does not hesitate to advocate practices that are proven to be valuable, whether he can establish a satisfactory theory to sustain them or not. In a word, either for the obstetrician or the student, this is the best practical work on obstetrics in the English language that we know of.

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Editorial.

Craniotomy—The Papal Opinion.

Our attention has been directed through the columns of the *American Israelite*, of Cincinnati, December 4th, to the Papal opinion recently promulgated in reference to the practice of *Craniotomy*. This opinion, we are informed, does not possess the authority of an official ruling; still it is said that every Roman Catholic physician in the city of New York is in receipt of a circular "containing a declaration by the Pope that the killing of an unborn infant is never right, even when the life of a mother can be saved in no other way."

We have nothing to do with the purely religious or ecclesiastical aspects of this subject. This we leave to other pens. Yet as a question of ethics it is one in which all good men are interested; and as one that directly affects the conduct of the medical practitioner it comes legitimately within the province of medical journalistic review.

The whole discussion narrows itself down to the simple inquiry, Is craniotomy murder? If so, no pretext can justify it. If not, whenever demanded, every principle of mercy and justice imperatively enjoins it. We premise that we are not to expect, upon a subject of this character, the full satisfying force of demonstration. It is sufficient if after a careful examination we find that the reasons which favor the practice under consideration outweigh those which can be urged against it; and this much we think can be shown.

In the first place, no one can determine the moment at

which the infant becomes a "living soul." Various opinions have been and are still entertained upon this question. Some contend that the soul is imparted at the time of conception. Others that it is at the period of quickening. Others, and as we think with greater show of reason, that it is not until the hour of live birth itself. With such diversity of opinion and no means to harmonize it, it is rather too bold to conclude that craniotomy *under any circumstances is murder*. It may be a wrong. It may be an injury to society. But no one can affirm with confidence that it is murder.

In the second place the relation of the child *in utero* to the mother is not to be overlooked in determining the relative value of each life respectively, and therefore, the duty of the physician when called to a case of perilous labor. It is to be remembered that the child as yet has no distinct, independent life. If we concede that it possesses a soul and to this extent is human, still the existence of that soul, and the destiny of that soul is dependent upon the mother. Let her life cease and its life ceases—so closely and intimately is its very being interwoven with the fortunes of the mother. On the other hand, however, the mother possesses an independent existence. She is a person. And is this fact to pass for nothing in our efforts to attain the truth? Can we accept it and still affirm that no higher sanctity attaches to the life of a mother than to that of her unborn child? or, that the removal of the child by craniotomy when the circumstances indicate its necessity, is, in any proper sense, an act of murder.

In other words, according to divine plan or order, the mother has a claim to life altogether independent of the child. The child has no claim to life, and no ground to expect it except through the life of the mother. To sacrifice the life of the mother, therefore, or to allow it to be sacrificed for the sake of the child, would be an act of manifest injustice. But to sacrifice the life of the child for the sake of the mother deprives the child of no right that it can claim, and therefore is not to be condemned.

But it may be affirmed that the reasoning here is specious —that all originally have the same common right to life, and that no individual can be sacrificed simply for the preservation of another without incurring the guilt of murder. True, *provided each individual stands upon the same level.* But in the case supposed the child has no independent existence; therefore no distinct unqualified right to life; and if robbed

of no right, it is certainly unwarranted to place the act by which it is removed in the category of murder. We can never capriciously destroy any life. Yet individuals may be so related as to invest one with higher claims to life than another, and whenever there is conflict between the two, those higher claims of the one are to be respected, even though death results to the other.

Once more. If it be admissible to introduce Scripture into this discussion, not for the purpose of settling mooted Christian doctrine, but simply as a perfect code of ethics, the case can be made much stronger. Moses gave this law to the Israelites in the twenty-first chapter of Exodus: "If men strive and hurt a woman with child, so that her fruit depart from her, and *yet no mischief follow*, he shall be surely punished according as the woman's husband will lay upon him; and he shall pay as the judges determine. *And if any mischief follow*, then thou shalt give life for life, eye for eye, tooth for tooth, hand for hand, foot for foot, burning for burning, wound for wound, stripe for stripe." A distinction is here made, as the reader will perceive, between the loss of the fœtus and the injury that may follow to the woman herself. If the fœtus is simply lost, the offender is to be fined as the husband and the judges may determine. If mischief accrues to the woman, the offender is to be punished according to the magnitude of the mischief, even "life for life." That is to say, the destruction of the unborn child is dealt with as an injury to *a thing*, while the injury that follows to the mother is dealt with as a wrong to *a person*. This law is significant, and clearly, in our estimation, justifies the practice of craniotomy when the mother's life can be saved thereby.

In conclusion, we would say that the operation of craniotomy is never practised by the judicious and conscientious physician except as a dernier resort. Mother and child must both perish. A hope of rescue to the mother may be entertained by the killing of the child, and simply with this in view the operation is undertaken. Who can condemn it?

Proposed Amendment to the Virginia State Board of Medical Examiners' Law.

Some one, without any known representative capacity, has requested the introduction of a Bill before the General Assembly of Virginia looking to the non-examination by the State Board of Medical Examiners of the medical graduates from the University of Virginia or the Medical College of

Virginia. The law as it now stands is practically the creation of the Medical Society of Virginia, which is a thoroughly representative body of the profession of the State; and that Society has neither asked for nor wishes a change of legislation of the kind suggested. The State Board of Medical Examiners, composed of thirty-two well-qualified practitioners from the ten Congressional Districts of the Commonwealth, who are constantly on the alert to meet the demands of the profession, and to perform their duty for the best interests of the people at large, have not thought such an amendment desirable. The Medical Faculty of the University of Virginia opposes any change in the law of the kind referred to. And we have heard that during a recent Faculty meeting of the Medical College of Virginia an expression of opposition to any such change was authorized. These several bodies are the recognized representative organizations of the State's profession, and yet *each and all* of these organizations oppose any such amendment to the existing law. We have not heard of any who have passed their examinations before the State Board who desire such a change. Who, then, is it that wishes the proposed amendment? The presumption is that it is some one, or the friends of some one, who fears the result of a contest for license to practice before the State Board, which has no connection with either college.

The adoption of the proposed amendment would pervert, in great part, the intention of those who framed and have accepted the present law as an expression of their want. Seeing that colleges in other States which enjoy even more than a national reputation for excellence and thoroughness, with professors whose lectures and publications are accepted as authoritative the world over, not unfrequently grant diplomas to those unable to pass the fair and practical examinations required by the Board of Examiners of Virginia and other States, it is no reflection upon our Virginia Colleges to suppose that, sooner or later, they will be likewise unfortunate. The State Board of Examiners is for the purpose of correcting the effect of such oversights of *any* of the medical colleges, and of thus turning over to the people physicians who are well attested as qualified to practise. The graduates in law from the only Virginia State institution granting legal diplomas are no more exempt from passing satisfactory examinations before the judges before practising at the bar than are those who graduated in other States or those who possess no legal diplomas at all.

If the proposed amendment becomes a part of the law, it would greatly risk the present correct standard for graduation in our two State medical schools. The inducement that would be continuously held out to them to lower their now very reputable standards for diplomas should be taken into consideration. Professors are not more than human, and it is a natural desire of Faculties to have large classes. Lecturers want large audiences, and many Faculties throughout the country have resorted to very questionable means to obtain them. Tuition fees have been remitted or cut down to the lowest sum upon which it is possible to subsist. Advertisements, or "confidential official" promises of "easy examinations for diplomas," and all sorts of like disreputable circulars have been distributed among the people as inducements to attend the course of lectures at, and secure their diplomas from this or that college. If such a state of things should ever exist in Virginia, the honest effort that has been made to furnish only thoroughly qualified physicians and surgeons to the people throughout the State will have proved to be a curse rather than a benefit, and will paralyze for a long while future efforts to do good.

The possible result of such an amendment to the Medical Examiners' Bill would be to degrade the positions now occupied by the Virginia Colleges not only in this State, but throughout the country. Both of them, as we have said, oppose such a change. Both of them are properly ambitious that their graduates should rank well in competitive examinations. They see the danger to themselves that would result from the adoption of the amendment now before the Legislature; and by their expressions of opposition to it, they but give voice to the prayer, "Lead us not into temptation."

The proposed amendment strikes at the foundation of the existing law, and it should be resisted by an overwhelming majority in the Legislature, as it would be if submitted to the representative medical vote of the State. We trust our Virginia readers will immediately arouse themselves to their greatest activity in urging their respective city and county legislators to dismiss the bill now before them.

Homœopathic State Board of Examiners.

A Bill is before the present Virginia Legislature looking to the establishment of such a Board in this State. There are not in Virginia, so far as we can learn, as many as fifteen homœopathic practitioners—not half as many homœopaths as there are members of the State Board of Medical Ex-

aminers, and there is no homœopathic practitioner in six or seven of the ten Congressional Districts of the State. How, then, can they organize a State Board of Homœopathic Examiners on the same plan as that of the existing State Board of Medical Examiners? The only way that we can suggest to the Legislature in order to make such a bill at all useful is to let the homœopaths of the State assemble in convention and appoint a committee of three or four of their number to examine on materia medica and therapeutics all applicants who might come before the State Board with the statement that they proposed to practise homœopathy. It is needless to add in explanation that it is only as to the application of remedies that homœopaths differ in opinion from practitioners of medicine.

Virginia State Board of Medical Examiners.

In order to keep up the record of those who have passed satisfactory examinations before the Virginia State Board of Medical Examiners, we have now to add to the list published (on page 449, October No., 1885, of the *Monthly*) the following names of gentlemen who have been granted certificates of proficiency:

Doctors.	Post Offices.	Counties.
W. H. F. Miller	Richmond	Henrico.
Thomas M. Norton	Alexandria	Alexandria.
George A. Taber	Richmond	Henrico.
Edwin P. Turner	Fergusson's Wharf	Isle of Wight.

The addition of these four to the thirty-two who had been licensed prior to September 15th, 1885, makes a total of thirty-six who have received certificates of satisfactory examination since the Board began the authoritative exercise of its functions. Of this number, one is a homœopath (Dr. Taber). Two applicants have been rejected since the September report.

It was natural to expect that there would be objections to the action of the Board by some of the rejected applicants for certificates. So far as we have heard, however, only one has attempted to resist the authority of the Board. Dr. Halsey, of Orange county, Va., virtually threatened to make his a test case of the constitutionality of the law. Notwithstanding his unsatisfactory examination before the Board, he undertook to practice. He was indicted by the County Court—the style of the suit or process at law being the "State Board

of Medical Examiners *versus* Halsey." The County Court decided the legal points in favor of the Board. We trust that this decision will be sufficient to deter others from challenging the authority of the Board in carrying into effect the provisions of the Act of the General Assembly of 1883–4.

We have watched the proceedings of this Board with a very careful eye, and we must say it is a statement that is due the Board, that its actions have thus far been remarkably correct and prudently conservative, regardful of the wants to be supplied the people and the profession, and at the same time mindful of the feelings of those who submit themselves for examination. The thirty-two members of the Board are all Fellows of the Medical Society of Virginia, and as such are wedded to the true interests of the recognized profession of medicine in this country. They have been judiciously selected from the body of the Virginia profession, and as a class are representative of the regular practitioners of this State. It is a remarkably competent and earnest body of workers, fully cognizant of the responsibility resting upon them, and look only to a faithful discharge of onerous duty as entitling them to favorable consideration by the profession and the community at large.

Whenever information is needed about the Board—as to the forms of application for examination, etc.—we would again suggest to our readers that time would be saved and more definite answers could be secured to questions relating thereto by addressing their letters to the ever active Secretary of the Board, Dr. Hugh T. Nelson, of Charlottesville, Va., or to the happily selected President of the Board, Dr. Wm. C. Dabney, of Charlottesville, Va., rather than to the Editor of the *Virginia Medical Monthly*, or the Secretary of the Medical Society of Virginia.

Preparations for Epidemic Visitations.

The article in this number by our esteemed friend, Dr. Bayles, on "The Clinical Management of Small-Pox in Epidemic Visitations," is so full of excellent suggestions that we depart from our custom in order to call special attention to it. In our Southern countries and cities there is so great a horror of small-pox attacks, while the confidence in the efficacy of vaccination to prevent its epidemic appearance is so general that we can scarcely apprehend the occurrence of an epidemic of that terrible scourge in our section of the country—especially as it is so commonly considered a part of a family physician's duty in our smaller towns and communi-

ties to *know* that his patients are protected from variola by repeated vaccinations, if necessary. But there are other epidemic diseases which we know of no way of averting that may come upon us—such as the summer epidemics of cholera, yellow fever, etc.—when the advice given by Dr. Bayles as to preparations for epidemic visitations should be remembered and followed. We could scarcely add to the practical value of his remarks were we to write pages. The purpose of this note is simply to invite the special consideration of our readers to the suggestions put forward in the article—so far as they refer to the importance, and the best plan of systematic organization of all available forces to meet and combat the epidemic invaders of our homes.

Doctors in the Virginia Legislature.

The Medical Society of Virginia and the profession at large is exceedingly well represented in the present General Assembly of Virginia. Drs. Harvey Black, of Montgomery county, E. T. Rowe, of Orange county, Crispen Dickenson, of Pittsylvania county, and Jacob W. Arnold, of Rockbridge county, are each active practititioners of medicine when at home, whose reputations for learning and ability in the profession are extensive and well-grounded. It may be safely asserted that medical interests of the State will be advocated by these able gentlemen whose sentiments make them despise the trickery of artful partizan schemers.

Dr. Moses D. Hoge, Jr.

This gifted son of the eminent divine of this city, who has been both an academic and a medical student for over three years in the universities of Berlin and Heidelberg, in Germany, has just taken his medical degree from the latter institution, and will return home early this month. He has been the recipient of distinguished professional honors at the hands of some of his illustrious professors of medicine, of which he has availed himself in preparing for the responsible duties of a practitioner of medicine. As a personal friend, and as a student of medicine in our office before he went to Europe, we tender him our congratulations and a cordial welcome home.

Virginia Medical Appointments.

Gov. Lee has appointed Dr. Geo. W. Harris, of Richmond, *State Vaccine Agent*, and Dr. J. C. Watson, Surgeon to the State Penitentiary.

J. Leonard Corning M.D.

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Original Communications.

ART. I.—**Biographical Sketch of Doctor James Leonard Corning, of New York City, and His Recent Remarkable Discoveries in Local Anæsthesia.**

Dr. J. Leonard Corning, whose remarkable discoveries in connection with local anæsthesia have attracted wide-spread notice in the profession of late, is a comparatively young man, as appears from the excellent portrait which constitutes the frontispiece of this number of the *Monthly*.

In investigating the ancestry of a large percentage of men who have made their mark in science or letters, we often encounter personal traits which would seem to account in no slight degree for the success attained by the members of succeeding generations. Dr. Corning's antecedents are of this character; for he comes of a long line of New England ancestry, many members of which, on both the maternal and paternal sides of the family, have distinguished themselves by their achievements in commerce, politics, and theology. Nor were these excellent people found wanting when the country required the services of her sons during the revolt of the Colonies against Great Britain, as the records of those

good old days amply attest. But whether in peace or war, they have ever been noted for their signal piety.

His maternal grandfather, Frederick Deming, Esq., was one of the most highly esteemed business men whom the city of New York has ever known. For twenty years Mr. Deming was the President of the Union Bank, in Wall street, where his integrity and great business capacity caused his advice to be widely sought in financial transactions.

The paternal grandfather was Edwin Corning, Esq., for many years one of the leading hardware merchants of New York city, and one of the founders of Plymouth Church, whose pastor, Rev. Henry Ward Beecher, was his life-long friend.

Concerning the parents of the subject of this sketch, it is enough to say that his mother, Sarah Ellen, was a woman whose intelligent solicitude for the welfare of her children was the foundation of their future success and happiness, while her matchless unselfishness of character was a source of wonder to those about her.

His father was early destined for the Church, and having graduated from Yale College, devoted the early part of his life to the Christian ministry.

With these preliminary notes, we may now proceed to the enumeration of the most noteworthy points in the career of the gentleman with whom we are most nearly concerned.

Dr. James Leonard Corning was born at Stamford, Conn., August 28th, 1855. While yet but a mere child, his parents moved to Poughkeepsie, on the Hudson, where his education was carried on at the River View Military Academy, under the guidance of the well-known disciplinarian, Otis Bisbee. The stringent military tone which pervaded this establishment served to exercise a powerful influence upon the mind of the scholar; and even at this late date, there still are valuable traces of the effects of this early militarism in a certain abruptness of manner and directness of language, both written and spoken.

It is not astonishing that these early associations should have bred an inclination for things military. Accordingly we find the embryonic doctor filled with aspirations for the

glories of West Point, instead of fixing his gaze upon those mystic disciplines which form the gateway to the healing art. About this time the civil war broke out, and this event fired the imaginations of the young, both at the North and at the South.

Destiny, however, had decreed that the young aspirant for military renown should never engage in actual warfare. In fact, about this time circumstances led to a trip abroad. During this sojourn in Europe, Switzerland, France, Belgium, Holland, Germany, Italy, England, and other continental countries, were visited. Finally, after many months of travel, the family settled for a time in Stuttgart; and here it was that the first positive step in a scientific direction was taken. Having manifested a decided inclination for the study of chemistry, the subject of this sketch was placed in the Polytechnic School, where, under the guidance of the renowned Professor von Fehling, he pursued his favorite science for upwards of two years. Botany, physics, mineralogy, and the elements of anatomy and physiology (the latter branches under private instructors), received attention at this time. Greek, Latin, French and German were also carried on in the same manner. It was while engaged in this desultory study of physiology and anatomy that he became impressed with the desire to devote his whole energies to the study of medicine. From this time on his inclination for the purely medical sciences deepened, until, having completed his scientific courses at the Polytechnic, he at length matriculated as a regular student at the University of Heidelberg. There, owing to his preparatory training in chemistry and physiology, he was able to enter at once upon the practical study of the latter science in the laboratory of Professor Kuhne, the successor of the renowned Helmholtz. To these special physiological studies much of his success attending his latter investigations is undoubtedly due. Through almost all his writings, this bias towards experimental physiology is discernible.

After spending two-and-a-half years at Heidelberg, he proceeded to Würtzburg, Bavaria, with a view of completing his medical studies under the renowned teachers of the Royal

University of that place, which is one of the oldest schools in Germany. While at Würtzburg he devoted a good deal of time to the study of pathology, under the immediate direction of Professor Rindfleisch, the celebrated investigator and author. Here, on the 5th of July, 1878, he received the degree of Doctor of Medicine, Surgery and Obstetrics, which in Germany is conferred after four years of study. The dissertation which he presented on the occasion of passing the examinations for this degree, was the product of a year of original work in the laboratory of Professor Rindfleisch. These investigations embraced a long series of experiments on animals, as well as laborious work with the microscope. They were extensively noticed in the medical press of Germany, England and France at the time, and have since been frequently referred to.

After completing his studies at Würtzburg, Dr. Corning undertook a medical tour, for the purpose of familiarizing himself with the scientific and clinical methods prevalent in the various capitols of Europe. During this tour of inspection, he visited and studied in the hospitals and other medical institutions of Vienna, Paris and London, finally returning to New York, where he has since continued to practice his profession, devoting special attention to diseases of the mind and nervous system. He has had unusual facilities for the study of mental diseases, having held positions of importance in some of the largest State asylums of New York. That he has improved these opportunities is strikingly attested by the fact that, since his arrival in New York, he has written five books, some of which have seen several editions and been translated, and has besides found time to contribute some forty articles to medical literature. Some of these latter have been noticed in every country where a medical journal is found.

Among the more recent writings of Dr. Corning we would mention the following:

"Prolonged Instrumental Compression of the Primitive Carotid Artery as a Therapeutical Agent," *Medical Record*, Feb. 15th, 1882; "Carotid Compression," a monograph published by Anson D. F. Randolph & Co., New York, 1882;

also a paper on this and kindred topics read before the New York Neurological Society, and published in the Philadelphia *Medical News* June 17th, 1882; and an article on "Sleep," in the *Medical Record*, July, 1882; an article in the *Medical Record*, April 7th, 1883; "Brain Rest, Being a Disquisition on the Curative Properties of Prolonged Sleep," G. P. Putnam's Sons, New York and London, first edition 1883, second edition 1885; a paper "On the Nature of Nervousness," *Medical Gazette*, Nov. 24, 1883; a paper on "Cerebral Exhaustion," read before the Medical Society of the County of New York, and published in the *New York Medical Journal*, Dec. 29th, 1883; a paper entitled "Can Insanity be Philosophically Defined?" *Medical Record*, Dec. 1st, 1883; a paper entitled "Considerations on the Pathology and Therapeutics of Epilepsy," *Journal of Nervous and Mental Disease*, Vol. X, No. 2, April, 1883; an article on "Electrization of the Sympathetic and Pneumogastric Nerves, with Simultaneous Bilateral Compression of the Carotids," *New York Medical Journal*, Feb. 23d, 1884; a paper "On the Prolongation of the Anæsthetic Effects of the Hydrochlorate of Cocaine when Simultaneously Injected, an Experimental Study," *New York Medical Journal*, Sept. 19th, 1885; "Prolonged Local Anæsthetization by Incarceration of the Anæsthetic Fluid in the Field of Operation," *New York Medical Journal*, Jan. 2d, 1886; "Local Anæsthesia in General Medicine and Surgery, being the Practical Application of the Author's Recent Discoveries," D. Appleton & Co., New York, 1886. The three last mentioned publications deal exclusively with Dr. Corning's researches in the domain of local anæsthesia. This discovery, and its practical application in medicine and surgery, are graphically described in the book last referred to, which will shortly issue from the press of D. Appleton & Co. Among his other works are "Brain Exhaustion, with Some Preliminary Considerations on Cerebral Dynamics," D. Appleton & Co., a book which met with a large sale, and an altogether favorable reception by the profession; "A Treatise on Functional Affections of the Brain and Spinal Cord," a large octavo volume of some 700 pages (in press). Besides

the last mentioned works, a paper on "Artificial Epistaxis," in *New York Medical Journal*, June 13th, 1884, and an article on "Spinal Anæsthesia and Local Medication of the Cord," in the same journal, of Oct. 31st, 1885, have evoked wide-spread notice in the medical literature of France, Germany, England, and Italy.

From a perusal of these significant statistics, it is easy to see whence the reputation which Dr. Corning has achieved thus early is derived. It is simply the product of talent coupled with a diligence which is nothing short of phenomenal.

We have already alluded to Dr. Corning's method of local anæsthetization. This is founded upon what an esteemed contemporary has recently termed the "wonderful and epoch-making discovery," that, when the local circulation is suspended in a part containing a solution of cocaine, the anæsthesia may be indefinitely prolonged. This phenomenon, as Dr. Corning explains it, is undoubtedly owing to the fact that the anæsthetic is incarcerated, so to speak, in the field of operation, being thus maintained in continuous contact with the sensory nerves. The chemical changes in the nerves, caused by the presence of the cocaine, may thus be maintained for any length of time. Moreover, what is of colossal importance, Dr. Corning's method of incarceration enables the surgeon to employ solutions of twenty times less strength than those which are possible under the old manner of administration. Thus, solutions of one-half per cent., one-third per cent., and even one-fifth per cent., have been successfully employed in operations of great magnitude, lasting an hour, or even an hour and a half. The immense advantage of these solutions of low percentage consists in the fact that they may be injected in large quantities without danger of causing serious constitutional disturbances.

Dr. Corning's method has been employed with the greatest success by Dr. J. Williston Wright in the extirpation of tumors, in-growing toe-nails, and plastic operations; in the reduction of fractures and dislocations by Dr. J. R. Conway, Jr.; in osteotomy, excision of the hip joint, radical operations for large abscesses, and other surgical procedures, by Dr. M. Josiah Roberts; in resection of metacarpal bones and Volk-

mann's operation for hydrocele, by Dr. Robert F. Weir; in congenital and other operations in minor surgery, by Dr. Charles E. Bruce; and by Dr. Daniel Lewis in operations for the extirpation of cancer. Besides these gentlemen, a large number of other surgeons in other parts of the country have employed Dr. Corning's method with perfect success.

For our own part, we have no hesitancy in declaring Dr. Corning's discovery to be one of the greatest and most unique achievements which recent American medicine has to show.

Dr. Corning is a member of many learned societies, among which are the New York Neurological Society, the Academy of Medicine, the Society of Medical Jurisprudence and State Medicine, the American Neurological Society, the Medical Society of the County of New York, etc.

To those young men in the profession who are seeking to attain eminence by some trick in medical politics—by some "necromancy of wit"—we commend these statistics.

ART. II.—**Some Remarks on Ophthalmia.*** By F. C. RILEY, M. D., New York City.

Considerable reference has been made recently to the prevalence of ophthalmia as existing among the inmates of institutions devoted to the care of the young; and the question is often asked, What is ophthalmia? Ophthalmia is a generic term for all inflammatory diseases of the eye, although conjunctivitis would be more generally correct, as the disease is, in most cases, confined to the conjunctival membrane (the mucous lining of the lids, which is thence reflected on the white of the eye).

Conjunctivitis may exist in several forms, such as acute catarrhal, chronic catarrhal, purulent and granular. The latter form is that which is most likely to spread among the inmates of institutions, especially if they are but poorly nourished and cared for. But any of these forms of con-

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junctivitis or ophthalmia may be communicated by one person to another.

The *acute catarrhal* order is attended with considerable pain, a discharge of mucus or muco-pus, and, if not properly combatted during its course, may run into a chronic condition which may eventually become granular.

Purulent Conjunctivitis is generally dependent on contagion, owing to the transmission of pus or discharge from the sources of disease. When existing, the discharge of pus is considerable—the accompanying swelling of the lids often completely closing the eye. Pain, heat and redness of the lids exist until the active inflammation subsides. The eye-ball is likely to participate in the inflammatory process as its circulation is interfered with and its nerves irritated.

Granular conjunctivitis may be a sequence of any of the foregoing orders, and, of course, may involve the cornea and even the entire eye-ball in a destructive inflammation.

Among other causes incidental to the inception of ophthalmia may be noted—1st, a strumous diathesis; 2d, atmospheric influences on the general health; 3d, direct contagion; 4th, other influences of an extrinsic nature that produce irritation of the eye by contact.

The first of these causes is by far the most prolific source of infection in conjunctival ophthalmia. Poorly nourished under-fed children, born and reared presumably under the most adverse circumstances, with a general appearance of emaciation, are familiar to all observers in every department of medicine. Such children, as they are but partially developed, are unable to resist effectually the ordinary vicisitudes of life, and succumb most easily to all the deleterious influences that an existence, especially in a large city, entails. It has been estimated that ninety per cent. of the cases of ophthalmia of the lids is due to this state. Probably nearly—if not quite—such a percentage is so caused.

2. *Catarrhal Conjunctivitis.*—In cases where the origin depends upon atmospheric changes, the most robust, as well as the strumous, are likely to become infected. Ophthalmia, or catarrhal conjunctivitis (acute conjunctivitis purulentia), so engendered, although as dangerous in affording a source

of contagion to others, is not, when occurring in otherwise healthy individuals, as likely to run a protracted course, or to involve the other structures of the eye proper. Ophthalmia *of this variety, of an acute nature*, frequently yields to treatment in a few days, although such cases should be watched carefully for a longer period, in order to prevent, if possible, any tendency to a chronic thickening of the lining of the upper lid; for if such occurs, the probability of relapses is thereby greatly increased. Such an issue often impairs the tissue involved forever afterwards, and it is therefore very essential that every means be adopted to obviate it. Sudden exposure to cold draughts, wet feet and clothing, and changes of a sudden nature occurring in the temperature, are all prolific of acute catarrhal conjunctivitis. The endeavors taken to avoid "catching a cold" are likewise a prophylaxis against this disorder.

3. Direct contagion is a not unfrequent cause of conjunctival ophthalmia, and it is communicated in many ways, but principally by clothing, handkerchiefs, and other appurtenances of the laboratory. Owing to the frequency of direct contagion, when a member of a family is suffering with a conjunctivitis of any nature, and from whatever cause, a careful isolation of the afflicted from the healthy is absolutely indispensable, at least so far as the use of towels, handkerchiefs, etc., is concerned. Such patients should not be countenanced in any attention to other members of the family, such as "minding the children," or aiding them in dressing, or in any of the many acts of kindness and affection so common among young brothers and sisters; for, even with the exertion of the greatest care, communication of the disease is quite probable until it shall have affected every member of the family.

4. Other influences that may produce ophthalmia existing in the atmosphere as foreign to its true nature, such as dust from various sources, gases, etc., of an irritable kind, smoke from factory-chimneys, and in fact any substances that will by contact with this delicate membrane lining the eye-lid, may excite it to an inflammatory condition.

Light, if too powerful, and of an artificial nature, by caus-

ing too rapid evaporation of the tears, may lead to an ophthalmia if its use be persisted in uninterruptedly. The overuse of the eyes in study or fine needle-work, reading or writing, is also injurious, and should always be avoided—especially when other members of the family are suffering with ophthalmia; for at such times the atmosphere of the apartment may become a means for its direct propagation, and work that would otherwise be harmless may, under such circumstances, become a factor to infection.

The means best adapted for the prevention of ophthalmia are of a hygienic nature, whether it occurs in private life or among the inmates of institutions. Cleanliness and a proper diet are the fundamental principles of such hygiene. As regards cleanliness, the sufferer should not only be kept clean in person and dress, but the habits of such should be made to conform with the necessities of the case. When the affection of the eye produces a constant discharge, the habit so often formed, especially among children in institutions, of wiping the same away on the corner of the apron or other article of dress, should be severely censured. Soft linen handkerchiefs should be allowed, which, after having fulfilled their usefulness, should be deposited in a suitable receptacle (not, however, with the other wash), from whence they can be subsequently removed and burned, or laundried separately and by themselves. It is always injudicious to mix linen contaminated with the secretions of disease with the general laundry work, and should never be allowed in an institution.

An individual suffering with ophthalmia should be allowed, and in fact should be required, to wash in running water, for by so doing contamination of the basin is less likely to occur, and such manner of propagation avoided. Besides, the advantages accruing from a plentiful supply of water are not to be overlooked. The bath, either a sponge or submerged, should be resorted to daily, and preferably on arising, as the skin is thereby kept in a state of healthful activity. The eyes themselves should be kept perfectly free from an accumulation of secretion, by the use of cloths wrung out in tepid or cold water, as is most agreeable to the sufferer.

The use of medicaments will depend upon the judgment of the attending physician. Astringents and caustics in various forms and strengths are used, and often with gratifying success as regards the abridgement of the disease.

The general systemic condition of each case should be inquired into, and such action taken as will result in a normal performance of the various functions, especially those of the alimentary tract, as the non-activity of the digestive apparatus is most certain to interfere with the circulation and secretions of other mucous membranes.

Ophthalmia requires also, for its prevention as well as cure, a proper dietary regimen. This will depend, in its nature, upon the various idiosyncracies and diathetic tendencies met with. The pernicious habit of feeding babies and young children on tea, coffee and sweets cannot be too strongly condemned. The very young should receive principally a milk diet, combined with certain cereals, such as farina, corn-starch, etc. Older children may be best served by combining with the foregoing a little meat and vegetables, but, as a rule, children under 12 years of age should not receive meat but once a day.

The regularity of the meal hour is important. It is better to serve four or five meals a day to children, and with some effort towards regularity, than to allow but three, and thereby encourage more or less constant messing during the greater part of the intervening time. Constant eating gives the stomach no time for rest and recuperation, both of which are essential to health.

A persistent disregard to the foregoing is almost certain to result in trouble sooner or later. Nothing, probably, tends to the existence of such distressing conditions among the children of the tenement-house population of New York to-day as the total disregard of parents and guardians of all laws of health, as well as of common sense, regarding feeding. Nursing babies are allowed the breast for twenty-four hours at a time, almost without intermission, to the thorough disorganization of their digestive apparatus, as well as the abolition of comfort and interference with the health of the parent. The latter will indeed often endeavor to compen-

sate for loss of proper food for the infant by the wholesale administration of tea (?), and the ultimate result to the child is anything but gratifying. Such a diet as many infants receive is the direct cause of their possessing a strumous diathesis—nothing else and nothing more, unless it be a lack of soap and water. The parents of many a strumous child are perfectly healthful in every respect, while the children live but to develop all the ills that flesh is heir to, and that in consequence of impure diet. The improvement and development of certain infants consequent upon a proper diet, for a few days even, has been remarked as almost wonderful, and such a metamorphosis can be studied daily at many of the large hospitals and dispensaries of this city by any one taking sufficient interest in those little sufferers to grant them the necessary time. In these days of advanced knowledge regarding hygiene and the various branches of medicine, ophthalmia should not be allowed to gain the ascendancy, either in private or public houses.

105 *Madison Ave.*

ART. III.—**Cholera.*** By A. S. GRANT-BEY, M. D. etc., Cairo, Egypt.

My views about cholera may be those of every intelligent physician in America. As the saying is, however, "The truth will always tell twice." I am sorry that politics should have got so mixed up with the question that it is impossible to formulate one's views on the subject without treading on the toes of powerful personages, who have not only the power but the will to harm you when you differ from them, and choose to say so. I was dismissed from the Sanitary Service, having prominently backed up the Sanitary Board in upholding that cholera appears in Egypt as a stranger and is therefore always imported.

Up to 1883, it was the universal opinion that epidemics of cholera in Egypt had always broken out from the importation of germs of the malady. The onus, therefore, of prov-

*Read before Medical Society State of New York, February 2, 1886.

ing the contrary in 1883 rests entirely with those who contend that that epidemic was not imported. But, although for the sake of science, we may engage in a discussion on the subject, yet we do not consider that our argument is at all weakened because we cannot point to the individual case or to the contaminated clothes that brought the germs of the disease. Unless the other side can prove spontaneous generation or transmutation, the original and universal belief in importation will remain untouched.

Have they given us any substantial reason why we should adopt the new-fangled doctrine? On the contrary, they have had recourse to subterfuges of sophistry and inaccuracies that won't bear the light of day. Have we not been told that cholera has continued to exist in the country since 1865, if not since the first epidemic of it in 1831? but "who outside a small political circle believes this"? True: but that circle have the appointments in their hands, and it is a hankering after them that poisons the well-springs of science. From reading a pamphlet recently put forth by Dr. Hassan Pasha Mahmoud, we are led to infer that the Sanitary Board* was solely to blame for the appearance of cholera at Damietta in 1883, because Drs. Chaffey-Bey and Ferrari—both members of the Quarantine Department†—have made a special study of the subject on the spot, and had given their opinion that Damietta was filthy enough, and its water so impure as to favor the spontaneous production of the disease, and, after a prolonged investigation, they had not been able to discover how it could possibly have been imported. It may be remarked that at this time Dr. Hassan Pasha Mahmoud was President of the Quarantine Board, and Drs. Chaffey and Ferrari were sent to Damietta by that Board to fulfil the mission behind which the President endeavors to screen himself. Be it observed, however, that the quarantine mission arrived at no definite conclusion, but merely formulated a number of "observations for the future judgment of science." It was but natural that the President of

* The Sanitary Board sits at Cairo, and one of its duties is to look after the sanitary condition of the country.

† The Quarantine Board sits at Alexandria, and one of its duties is to prevent the importation of contagious diseases.

the Quarantine Board should endeavor to exonerate himself, as the general consensus of opinion was that the cholera had been allowed to enter the country through quarantine irregularities, for which he must be held responsible. ("Qui s' excuse s, accuse.") Dr. Channiery, a member of the Quarantine Board, in his report* of the cholera of 1883 to the French government, says: "The quarantine meeting of May 1st was rendered abortive by the English delegué." Again: "At the meeting of May 14th, while it was decided to impose quarantine on arrivals from Bombay, no restrictions at all were placed on vessels coming from Calcutta, where the cholera was raging more severely." . . . .

"At a meeting of June 5th, it was decided that any vessel leaving Bombay on or after June 13th, would be free from quarantine. It was found out afterwards that this act was not justifiable, as the cholera continued in an epidemic form at Bombay."

Dr. de Castro, the Italian delegué at the Quarantine Board, tells us, "There must be one half the members plus one present in order to make a Board meeting valid, and it sometimes happens that a meeting is aborted by the intentional absence of some of the members."

From the above statements we may gather that the responsible duties of the Quarantine Department were performed in a perfunctory manner, and, in reality, all along the Suez Canal there is no quarantine surveillance whatever, so that infected persons could and do leave their steamers while passing through the Canal in quarantine, and sail straight across Lake Menzaleh to Damietta without let or hindrance. Those who deny the importation theory also deny the efficacy of quarantine, even if it were possible to import the malady. Some of the champions of the above theory, however, have singularly stultified themselves by contending that "the cholera could not possibly have been imported into Egypt, because quarantine had been imposed in Egyptian ports from the beginning of May until the 27th of June—five days after the commencement of the outbreak at Damietta." (Blue book.)

* *Le Cholera d'Egypte en 1883* Par le docteur Channiery. Alexandria.

We don't suppose the President of the Quarantine Board meant to do any harm to his country by countenancing the endemic theory of cholera; but we may be pardoned for drawing his attention to what happened in the time of Mohammed Ali, when the commerce of Egypt was utterly destroyed on account of the permanent quarantine kept up by Europe against all Egyptian ports, because plague and cholera were wrongly considered endemic there. Mohammed Ali strained every nerve to have this foul stain removed from his country, but not till after his death was Europe convinced that these maladies were not endemic in Egypt. From that date, however, quarantine was done away with (unless when an epidemic was raging), and the commerce of Egypt took a new start, and has ever since continued to increase. Fortunately, the persistent attempts to revivify the old sore has proved a failure; else Egypt would have had to submit once more to a perpetual quarantine, and thereby its commerce, which has been so wonderfully developed since the time of Ali, would have been completely ruined again. Europe has, however, discredited the endemic theory, by giving free pratique to arrivals after the epidemic had ceased. This must have been an unforeseen argument against the theory, very significant in its bearing, and little dreamt of by the endemic theorists. (Hinc hæc lachrymæ.)

There is one question we should like to put to Dr. Hassan Pasha Mahmoud. If, at the time of the cholera epidemic he had been President of the Sanitary instead of the Quarantine Board, what value would he have attached to the report of the Chaffey-Ferrari mission? We have already seen how this mission originated, and we can easily infer what bias, if any, would actuate its members. Dr. Channiery, the French delegué at the Quarantine Board, has told us that the official report of Drs. Chaffey-Bey and Ferrari was for the purpose of upholding the theory of the spontaneous origin of the cholera of 1883; and this statement is corroborated by Dr. Mahé,* who says that Dr. Hassan Pasha Mahmoud was among those whose opinion was moulded into

* *La recherche de l'origne du Cholera en 1883*, Par M. le docteur Mahé, Medicin Sanitaire de France. Constantinople.

conformity with the official declarations of the English government, and the assertions of Surgeon-General Hunter, and that these gentlemen were influenced by considerations of an order that he did not care to mention.

Let us now examine somewhat in detail this Blue Book report which affords Dr. Hassan Pasha Mahmoud such a fulcrum for upholding the endemic theory. It begins by telling us that the authors of it were members of two commissions that had been sent to Damietta on the 24th of June. To be strictly accurate, they were members of the Quarantine Commission that joined the Sanitary Commission at Damietta to ascertain the nature of the disease that was raging there; and the result was that they both signed a document to the effect that the disease was epidemic cholera, and that notwithstanding the bad sanitary state of the town, which is only *favorable* to the development of the epidemic, importation was presupposed, because the disease does not exist endemically in the country. Notwithstanding this, we know that Dr. Ferrari shortly after asserted, in the presence of Mons'r Cassèry (Vice-Consul of France) that the disease was not true cholera, and that it would all be finished in eight or nine days, thus proving how worthless his opinion was, even when attested by his signature.

When the cholera broke out here in 1883, there was no one so opposed to the importation theory as Mr. Borg, the British Consul, and I was called to task by him for holding the theory I did. When, however, the disease made progress, and at last reached Cairo, Mr. Borg veered round, and like a man acknowledged that he was wrong in the opinion he had entertained, and he and I then sailed in the same boat. We have continued ever since to ferret out the truth by every means in our power. He, as Consul-General, got at statistics, etc., that were out of my reach, and the result was that he drew up a very valuable consular report on the cholera, giving statistics and facts, and published opinions, but drawing no inference therefrom himself. He had this printed in pamphlet form, at his own expense, and sent copies to the British Foreign Office and the Consul-General here. The Foreign Office stated that the narrative favors

the contagious theory, which they can in no way countenance, and so Mr. Borg's report is suppressed. The fact remains, however, that when cholera appears in Egypt, it is the result of the germs having been imported; and I am glad to find that, however politically wrong I may be in my ideas about it, I am backed up by the scientific section of our profession.

Asiatic cholera is a specific disease, characterized by violent vomiting, and purging with rice-water stools, cramps, prostration, collapse, suppression of urine, albuminuria, etc., tending to run a rapidly fatal course. It is essentially different from sporadic cholera, the difference being characterized by the presence of a germ (comma bacillus) in the former, and its absence in the latter. Asiatic cholera is transmissible, because this germ is a living organism, and transmissible in a live state. Much may be done to prevent its spread. Every epidemic rages amid filth. Personal cleanliness and house cleanliness are of vital importance when the elements of disease and death are around us. Nuisances of every description should be removed. Rooms, cellars and water-closets should be whitewashed; the crowding of sleeping apartments should be avoided; thorough ventilation should be allowed. Food or drink injurious at ordinary times is doubly injurious in cholera seasons. Impure water is the most convenient vehicle for the cholera germ. To be quite safe, it should be boiled and carefully cooled before being drunk. Partially-ripe fruit should be cooked before eaten, and ripe fruit raw should be washed before it is taken into the mouth. Temperance in eating, drinking and exercise should be recommended. Thorough disinfection of the apartment in which a choleraic case exists, of the person of the patient, of the matter vomited and that discharged from the bowels, of all materials that have come in contact with these matters and of the persons and clothing of the attendants, is of vital importance. Among the best disinfectants are—

(*a*) Pure air, and plenty of it. The germ of cholera becomes entirely inert in the open air, and this is the reason

why it always travels along the routes of communication, whatever the direction of the wind may be.

(*b*) Heat is a valuable disinfectant. Hence, if our food is well cooked, and our drink well boiled, the danger of getting cholera through these is removed; and it is well to understand that the evidence in favor of the communicability of cholera by means of water and food contaminated with the cholera germ is now overwhelming.

In addition to pure air and heat, sulphurous-acid fumes, chlorine gas and permanganate of potassa may be mentioned as valuable disinfectants.

At the commencement of an epidemic, cholera manifests itself without a premonitory symptom, and death takes place in a very few hours; but ordinarily there will be a premonitory diarrhœa, the stools being copious and watery, followed by great prostration of strength. If judiciously treated, many persons recover from this, *the first stage*, of cholera, but if neglected, the disease grows rapidly worse. The stools becoming more frequent, have the appearance of rice-water. Vomiting now commences, and prostration is complete. There is intense thirst, and severe cramps in the limbs, and the voice becomes husky and the pulse imperceptible. The duration of this, *the second stage*, of cholera, is very uncertain; but the weaker the pulse becomes, the nearer the patient is to *the third stage*, or that of collapse, from which few recover. Those who recover, however, often succumb afterwards to some of the complications set up by the primary disease—such as suppression of urine, inflammation of stomach and bowels, etc.

In the first stage of epidemic cholera, endeavor to stop the purging; here opium is our sheet-anchor. The best way of exhibiting it in cholera is the preparation known by the name of "tinctura chloroformi cum opii (Kirby)," (℞. Tinct. opii, spts. camphoræ, tinct. capsici, $\overline{aa}$ ℥ss; chloroormi, ℥iss; spts. vini rect., ad ℥iiss. M.), of which twenty drops for an adult and five drops for a child should be given in half a wine-glass of water, or chamomile tea every hour or two till diarrhœa ceases, and no nourishment given except beef tea or chicken soup and rice. If the diarrhœa is not

checked and vomiting commences, the "anti-cholerique selon Pasteur" (℞ Hydrarg. bichlor., gr. ij.; spt. chloroformi, ʒx.; spt. camphoræ, ʒv.; tinct. lavand. co., ʒss.; spt. rect., ad ʒij. M.) should be used and the other medicine left off. This "anticholerique" contains the ingredients for killing the germ of the disease and for stopping the diarrhœa, vomiting and cramps, while it stimulates the heart and favors a general re-action.

It is very hot and biting, and has therefore to be mixed with a sufficient quantity of water or chamomile tea to make it palatable. The dose is teaspoonful to an adult and half a teaspoonful to a child or young person, in a wine glass of water, every quarter of an hour, every hour, and so on according to the urgency of the symptoms.

Mustard poultices may now be applied over the bowels, and mustard with a little olive oil should be rubbed up and down over the cramped muscles.

Thirst should be assuaged by means of ice, which is very agreeable to the patient, while giving water to drink *ad libitum* would only hasten death. The ice should not be stinted, but let the patient eat as much of it as he chooses; he will frequently devour a pound or two of the ice in the course of an hour. In the treatment of cholera, let there be no question about the value of the ice. The patient should be prohibited from drinking water beyond what he gets from the ice or has to take with his medicine. A little warm chamomile tea, however, may be given in small quantities from time to time to soothe the stomach and allay vomiting. In the stage of collapse, heat and friction may be applied with advantage to the surface of the body, and give the patient more chamomile tea to drink, or even some iced water. Wine and stimulants at this stage do harm instead of good; therefore they must on no account be given.

When re-action comes on, guard against doing too much. Iced milk or arrowroot or weak beef tea may be administered by the rectum every six hours in case of great prostration. Many nostrums have been put forward for the cure of cholera, and in 1865 they were all faithfully tried and found wanting.

In conclusion, my opinions about cholera may be briefly stated thus: Cholera is caused by a living organism whose habitat is the Delta of the Ganges just as the habitat of the Hippopotamus is the upper Nile. All attempts on the part of this organism to form new habitats have failed—at least as far as Egypt, Europe and America are concerned. Were you to fall in with a Hippopotamus in the Hudson river you would at once conclude that it had come from its well known habitat or had escaped from a menagerie that had originally got it from the Nile. Now, as our great scientists, Tyndall and Huxley, have renounced the idea of spontaneous generation, the same reasoning that is applicable to the Hippopotamus is equally applicable to the lowest living organism, whether animal or vegetable. The cholera germ being a living organism is transmissable in a live state. I allow that this organism may have different stages of development and that it may not be capable of inducing a choleraic attack but at a certain stage of its existence. Hence recent choleraic stools may not be contagious, while stale ones are highly so.

Epidemic cholera differs from sporadic cholera in many respects.

1st. The difference implied in the names.

2nd. In sporadic cholera you have generally an indigestion history along with a spell of hot weather.

In epidemic cholera, on the other hand, you have no such clue to the malady, but on tracing it you find that it has come from a port or frontier town that has been in communication with an infected district and on further inquiry you will find that every epidemic of this disease outside of India has been preceeded by a recrudescence of it in India.

3rd. Sporadic cholera is more a summer disease when the fruit is ripe, while epidemic cholera has little or no respect for seasons.

4th. Sporadic cholera although often attended by partial suppression of the urine is not accompanied by albuminuria.

5th. Sporadic cholera is not followed by a typhoid state as in epidemic cholera.

6. In sporadic cholera there is not the comma bacillus of

Koch. Whether this organism is the cause of the effect of epidemic cholera, it is at least diagnostic of it, and if we can prevent its development we shall extinguish the disease which its presence indicates. If we were to prevent the thunder storm the milk would not sour, but let alone the thunder storm to work its worst and ply your knowledge to prevent the development of the bacterium lactis and, when you have achieved that, you will be able to preserve your milk from souring even in unfavorable electrical conditions if the bacterium is the immediate cause of the souring.

7th. In sporadic cholera followed by death the mucuos membrane of the bowel shows that inflammatory action has commenced at the stomach and extended from there down into the bowel. In dry cholera, on the other hand, followed by death, you will find the mucous membrane of the lower part of the ileum, for about two feet above the ileo-cœcal valve particularly, congested, almost pink in color, while the rest of the mucous membrane may be perfectly normal in appearance.

8th. Sporadic cholera is not a contagious disease in any sense of that term, and is not, therefore, imported into the locality where it exists, but has taken its origin on the spot from causes above alluded to. Epidemic cholera, on the other hand, is always brought to a non-infected locality by cholera patients or by articles that have been smeared with the dejections of choleraic patients.

9th. Epidemic cholera is very fatal, while sporadic cholera is not. My explanation of the cause of death in epidemic cholera is something like the following:

Immediately above the ileo-cœcal valve there is a decided slowing of the downward movement of the contents of the small intestine and a partial check at the valve itself by ascent of fæcal matter from cœcum to ascending colon. This affords time for the development and multiplication of the cholera bacillus, the spores of which had been swallowed and had retained their vitality while the swallowed bacilli themselves had perished in the acid juice of the stomach. Be this as it may, it has been demonstrated that at the ileo-cœcal valve, and for some little distance above, we find the chief seat of the cholera bacillus.

At this particular part of the bowel absorption is more active than at any other part, proving that here there must be a larger supply of the delicate nerve net-work that exists in the wall of the intestine. The facility afforded at this part for the absorption of ingredients that had been left unabsorbed by the upper part of the bowel, no doubt, also favors the boring propensity of the cholera bacillus. A mechanical irritation therefore of the fine layers of nerve net-work is set up by this organism, the result being collapse and death just as we have in fatal strangulated hernia. The secretion of a special poison or the production of a ptomaine by this bacillus is not, in my opinion, necessary to account for death.

The ganglionic system of nerves is simply upset through the local irritation caused by the active presence of this organism. The control over nutrition is lost; the doors are thrown wide open for exosmose, and thus endosmose is prevented. All the organs immediately under the control of the sympathetic system are nearly paralyzed in their action or very much disturbed. The blood from loss of serum becomes thick and unfit for circulation and the heart refuses to act and therefore ceases to beat.

ART. IV.—**New Remedies—Henry's Dissolved Cod Liver Oil Butter.** By J. J. CALDWELL, M. D., Glyndon, Baltimore Co., Md.

Dissolved Cod Liver Oil and Phosphate of Lime, prepared by Robert J. Henry, M. D., Manufacturing Pharmacist, Reisterstown Md., a new improvement in the mode of manufacture, has been given a thorough trial and is highly appreciated by those of my professional friends who have had a chance to use it. It is certainly a valuable product and supplies the want of the profession so long existing for an article that could be, (1) thoroughly dissolved, (2) easily digested, (3) palatable and easily taken, (4) no nauseating or disagreeable effects following its use, with the full benefits of the 100 per cent. of effect, without loss of any oil passing off

through the bowels undigested. In the first place, as is well known, the raw cod liver oil was always found to nauseate the stomach, produce unpleasant eructations, and generally become so distasteful as to prevent its use, when really its beneficial effects were so much needed. Then to render the raw oil more palatable the emulsion process was devised, which only made a more tasteful article, without improving in any way the great objectionable points, viz: to make the oil globules soluble so that their full effects could be obtained. This new improvement in the mode of manufacture overcomes the difficulty so long experienced with the emulsions, and supplies an elegant, tasteless and digestible compound.

The manufacturer of this new improvement, presents in his paper the following points of his experiments with cod liver oil, which I regard as valuable information. In the first place, he informs me that he has found cod liver oil in its virgin state to be so insoluble, that, when taken into the stomach, only about forty parts are digested or taken up by the pancreas, and the balance (sixty parts) necessarily passes off by the bowels, the patient losing the benefits of this large proportion. Now the emulsions (the suspended globule preparations, made with gum, glycerine, sugar, etc.,) which have been so largely used, as will be seen, are *no improvement* on the *raw oil*, for the reason that the globules being so insoluble in the *raw state*, the emulsions are nothing more than suspended *raw oil globules* in exactly the same shape, only held in suspension by the gum solution employed; so emulsions are only suspensions of the original globules without change in any way from the raw oil. When this reaches the stomach, it, of course, shares the fate of the raw oil, and passes off by the bowels in the same proportion undigested. This is the reason why the full effects of the oil have not heretofore been obtained.

To remedy this difficulty, this process was devised. The oil is dissolved by machinery, the oil globules are torn and emptied, and by heat and friction converted into a palatable and digestible liquid butter, beautiful and cream-like in appearance, and the disagreeable taste so objectionable in the raw oil and the emulsions, is almost entirely removed. This

new product can be tolerated by the most delicate stomach without the least distaste from its use. I have found this of great advantage in the treatment of delicate females and young children who use so much oil, and object to the other preparations on account of their disagreeable taste. It contains fifty per cent. of pure cod liver oil and there is nothing else added to its composition, but the phosphate of lime (8 grains to the ounce); and it contains no gum, glycerine, or sugar which so often starts a saccharine fermentation and offends the stomach. This elimination of phosphorus from the phosphate employed, acting with the full force of (carbon and hydrogen) heat attained from the dissolved oil, (and so quickly established,) is far better than any results to be obtained from the hypo-phosphites—so much so that I take this occasion to note it.

We all know the great benefits to be obtained from cod liver oil; and where limited effects could only be derived from the use of the old forms of administering it in emulsions it can be readily seen how much more effective results can now be realized from the use of the Dissolved Cod Liver Oil. In coughs and colds, I have found it to be very efficient, being so peculiarly cooling and soothing in its effects that it entirely supersedes the necessity of syrups and like preparations. In fact, I know of no preparation of cod liver oil so valuable and effective as this, and in broken down conditions, where other forms of oil cannot be tolerated, it comes in and is particularly useful. The advantages of taste, solubility, etc., with the full absorption of all the oil employed, make it the most useful and effective preparation now in use.

Poisoning from Tincture of Bryonia.—C. Dixson, M. D., reports, in the *Australasian Medical Gazette* a case of poisoning by eighty minims of the homeopathic tincture of bryonia. He says the symptoms were very much like poisoning from veratrum viride, and were treated by stimulants, as ammonia, nitrite of amyl, coffee, etc, with heat to the extremities.

Clinical Reports.

Deformed Penis.—By R. H. BAYLOR, M. D. Pleasant Ridge, Va.

I was called a few days ago to visit an infant child of Mrs. B. On reaching the house, the mother presented her child for an examination, saying, the "bottom parts were out of order." The child was two weeks old and had a very healthy look and was as large as children at that age. Upon an examination of the privates of the child, I found a very uncommon deformity. I had never, in an active practice for thirty-five years, read of or seen a case like it. The root of the penis was attached firmly to the ossa pubis, but the body of penis could not be seen, so deeply buried under a continuation of the abdominal skin and muscles. The scrotum was not divided into two lateral halves by the raphé, but the scrotum resembled a large bag and was sinuous. After examining the scrotum carefully, the two testes were found and between them the penis could be distinctly felt. The glans-penis made its exit about the middle of the scrotum between the testes. The glans-penis had its usual appearance and was covered with the prepuce, and at the apex the meatus urinarius was seen. The child passed water freely while I was making the examination. An operation will relieve the deformity.

Trypsin, Fairchild's,

Is a solvent for diphtheritic membrane. The well known properties of this principle of the pancreatic juice give the strongest grounds for anticipating success in its application for this important purpose. Trypsin acts quickly and powerfully upon fibrin and fibrinous membrane. It is not dependent upon the inter action of acid as is the case with pepsine. It is most active in a slightly alkaline media. It may be applied by spray or brush. In practical use, the results have been very encouraging. Messrs. Fairchild Bros. & Foster announce, that, owing to the great cost of this product and their inability to more than keep pace with the actual demand, they cannot offer samples. It may be obtained of the principal drug houses in this country and is dispensed in ½, ¼, and 1 oz. bottles with full directions. Correspondence will receive prompt attention.

Correspondence.

Dr. Jackson and the Medical Society.

Mr. Editor,—I regret the necessity of having again to correct your statements, which have been more like those of a partizan than of a Recording Secretary of a Society.

You state that "charges were at once brought against Dr. Jackson" by the Norfolk Medical Society. This was a mistake. They brought no charge; they had none to bring against me; they did not charge me with having violated any law, for I had violated none. There was not the slightest allusion in their communication to any law broken, and the inference is that they had no charge to bring against me. If I have broken any law, I would like to be informed what law, and how I broke it. The Norfolk Medical Society has never informed me on this point; therefore they have brought no charge against me. There certainly was, as you say, "a technical irregularity" here; for did you ever hear of an indictment that did not recite in what manner the accused violated the law?

You state that you, as "Secretary, used every means in his (your) power to preserve accurate notes of what transpired," and that you "have no desire to prejudice the cause of either party in this matter." If this were the case, is it not strange that the Secretary should be so particular to repeat everything that was calculated to prejudice me with those not present at the meeting of the State Society, and as carefully to omit everything calculated to remove that prejudice? For instance, when, as you report, Dr. Parker raised the point that I might be guilty of a breach of ethics in divulging what occurred at a consultation, the Secretary entirely omits what I said in justification of it, though my reply was made openly on the floor, and must have been heard by every one. I admitted that I would not have been justified in repeating what was said in consultation if I had not heard that Dr. Nash had himself violated the secresy, and had been bragging of the wonderful effect of the prescription which he proposed, which he said "was so great

that it was only *necessary for him* to go to see the patient twice." I am sure that any one, after that, will consider me justifiable in telling what the prescription was, especially when it was necessary, in order to correct his statement, and as it was my criticism of it which drew from Dr. Nash his avowal of a belief in homœopathy, which I considered as disqualifying him for a position on the Examining Board. The prescription was to give two drops of castor oil and two drops of turpentine in mucilage every two hours to an adult patient in dysentery. I asked, "What do you expect that to do?" He said that those two drops of castor oil would have a most soothing and healing effect on the alimentary canal. I remarked that I "did not believe that the alimentary canal would know that it was there," and that the prescription seemed to me "to savor of homœopathy:" and this brought out Dr. Nash's emphatic declaration in these words: "I tell you, sir, that there is more truth in homœopathy than *you all* are willing to admit."

This is all I said. And where are the misrepresentations the Secretary so frequently alludes to? Dr. Nash has not denied, and cannot deny, this account of what passed. To the truth of it, *verbatim et literatim*, I shall make oath before some official authorized to administer it; and if Dr. Nash makes oath to the contrary, it becomes a question of veracity between us.

I reported to him by letter what I had said, and told him that if I had misrepresented him, or if he had anything to say in extenuation or justification, that I would do everything in my power to repair any injury I may have done him. He has taken no notice of that portion of my letter, which I take to be a virtual admission of the truth of what I had said.

That the Society agreed with me in the opinion that Dr. Nash's avowal was a disqualification for the important position on the Examining Board, was evinced by their vote electing Dr. Kemper by a vote of 46 to 39.

But the Editor, who is also Secretary of the Society, perceiving the awkwardness of Dr. Nash holding an office by appointment of the Governor, in direct contravention of the expressed wish of the Society (a position which I would not

have supposed any member of the Virginia Society would accept under the circumstances), has changed his tactics, and contends that the report of the proceedings, "to preserve accurate notes of which he had used every means in his power," were, notwithstanding, incorrect; that the afternoon vote was not reconsidered at all; that Dr. Kemper was not elected; and that "Dr. Nash, therefore, stands as the party duly elected by the Society to fill the vacancy on the Board of Medical Examiners." If this were so, why did the Secretary notify Dr. Kemper of his election? Why did he try to persuade him not to accept the position? And to induce him not to accept, why did he urge other reasons, when the one that he was not elected would have been amply sufficient? Why did he report the vote as being 46 to 39, which he said in a letter to me he had obtained "*from the minutes*"?

The truth was, that the reconsideration was had—was passed by "*acclamation*" (according to the Secretary's anomalous meaning of that term), and Dr. Kemper was elected by the vote stated in the minutes; and we all exercised our high privilege in voting according to the dictates of our conscience and fulfilled the high duty which we owed to the Society, our profession and the State. It was the privilege and the duty of each and every member on that floor, if he knew any just cause why a candidate should not be elected, to so declare; and if I had been silent, when I knew of what I considered to be disqualification, I would have been derelict in my duty and would have deserved censure for it. The Secretary even blames me for remaining silent as long as I did. Really some persons are hard to please.

In a communication to the Norfolk Medical Society or to some individual member thereof, containing an *ex parte* statement of the matter and upon which the action of that Society was based, the Secretary makes a number of statements, some of which he afterwards corrected, and all of which I denied and had proof of their incorrectness in my profession, except this one regarding the vote, which I partially admitted. But the Secretary now declares *this one* to be incorrect, which if true, leaves *not one statement* in the communication the correctness of which is admitted.

I am glad, however, for the credit of the State Society that the Secretary's official report is, this far, correct, for otherwise, the Medical Society of Virginia would have placed itself in very much the same position as that of the New York State Society, by endorsing one who had *avowed* a belief in homœopathy, and might, thereby, have compromised herself and endangered her connection with the American Medical Association, which ruled out the New York Society for merely agreeing to meet homœopaths in consultation. If whether the Norfolk Society will be considered as having placed itself in this predicament remains to be seen.

S. K. Jackson.

Notes by Editor.—In our January number, I said editorially that Dr. Jackson's letter to the Norfolk Medical Society was "adroitly worded in some particulars." How about the one now before us?

1. *As Secretary* of the Medical Society of Virginia, I have not alluded to any charge against Dr. Jackson; and he makes distinct use of the fact in his letter (dated November 4, 1885,) to the Norfolk Society. Hence, any attempt to connect myself *officially* with his late unfortunate predicament in Norfolk is altogether gratuitous.

2. Unless one seeks to cover self behind technicalities, most people would consider the resolution adopted October 1st, 1885, by the Norfolk Society as "a charge," or "charges." It says, in substance, "This Society has heard with regret" that one of its members, "having been unanimously elected one of the members of the State Board of Medical Examiners, was subsequently deposed by a reconsideration; that this reconsideration and changed vote proceeded from representations made and urged, directly and indirectly, by another member of our Society, Dr. S. K. Jackson," which represented Dr. Nash as "unworthy a place on the State Examining Board."

3. I was not aware that any material point was omitted from the report given of the proceedings in the *Transactions* of the State Society. I have no objection to correcting the minutes of the late session if an error or essential omission is found. I, however, see no modifying bearing of the suggested interpolation upon the character of the charge made by the Norfolk Society.

4. "The misrepresentations the Secretary so frequently alludes to"! *As Secretary*, I have never even once alluded to "misrepresentations" by any body. In the January editorial, I used the word "misrepresentations" only once, and that once only in the following language: "Will he [Dr. Jackson] prove that the "changed vote" of Thursday night was not greatly attributable to his misrepresentations, according to the belief of his Norfolk confreres?" Dr. Jackson's knowledge of definitions is defective if he styles a single allusion to a fact, *frequent*. Perhaps it may be "one too many" for him.

5. If Dr. Nash did admit that there was truth in homœopathy, did he thereby concede that it contained the whole truth, and as an exclusive practice, it was the right school to adopt? The recorded vote ("Extracts from Transactions of the Norfolk Medical Society") shows conclusively that Dr. Nash's confreres (at a largely attended meeting), who know him intimately, do not believe him even "tinctured with homœopathy," in the ordinary acceptance of this term, in that he was unanimously elected President of that Society," as a mark of confidence" in him "in the face of the statements" about him.

6. I have no where contended that the report of the proceedings of the late session of the State Society was incorrect, as Dr. Jackson charges. I have only pointed out, *editorially*, on a review of the report, that the proceedings were unparliamentary. A vote to reconsider Dr. Nash's election during the afternoon was never taken. Such a vote to reconsider the election was the only parliamentary method. No such method was adopted, and therefore the *proceedings* were unparliamentary. This statement cannot imply that the recorded *minutes* were "incorrect." Quotations should be more accurate when intended to convey a correct idea of the point of contention. Such a course would please "some persons" at least.

I need not say more to prove that Dr. Jackson's letter "is adroitly worded in some particulars," and inaccurate in other statements, while a reading of its last paragraph will show a surprising want of information on his part as to the position taken by the American Medical Association, about which he efforts to enlighten others.

Analyses, Selections, etc.

Dr. Jackson and the Medical Society.

Dr. Augustus Caillé, of New York, read a paper upon this subject before the New York Academy of Medicine, February 4, 1886 (*New York Medical Journal*, February 27, 1886), and bases the following conclusions upon his experience in two cases in which he secured permanent drainage by means of a drainage-tube introduced midway between the umbilicus and pubis. In both cases life was probably prolonged and certainly rendered more bearable by the operative interference. The writer claims that his "object was the amelioration of certain extremely troublesome symptoms which almost invariably attend a marked degree of ascites, and further, the abrogation more or less complete, or at least the staving off of a disturbing element dangerous to life."

The points considered by the writer are, "What are the symptoms, dangers, and general mechanical effects of ascites? 2. How is a collateral circulation established in cirrhosis of the liver? 3. Will the absence of mechanical pressure (ascites) promote collateral circulation, and thereby prolong life and add to the comfort of a patient with ascites from any cause whatsoever? 4. How is permanent drainage best accomplished, and in what cases should it be tried?" He answers his third question by the following comments: "The pressure of much fluid in the abdominal cavity is detrimental and dangerous to life. Extensive exudation may do harm mechanically and endanger life because of interference with the inspiratory action. This momentary danger is, it is true, readily removed by simple puncture. No sooner has relief been procured than the serous exudation re-appears, and the organs of digestion, secretion, and excretion having assumed their normal condition and action after the tapping, are again subjected to pressure, and, in consequence, their functional activity is again diminished. This interference in the varied process of the digestive apparatus reacts very unfavorably upon the general organism, and hastens the fatal issue. Particular attention is directed to the occurrence, through reflex irritation, of a gastroplegia or paralysis and dilatation of the stomach observed in peritoneal exudation. According to Traube, pressure upon the peripheral branches of the pneumogastric nerve is said to cause or induce muscular atony of the stomach." The writer concludes as follows, that the good

done out-weighs the harm resulting from the withdrawal of this albuminous fluid from the system. "Therefore it is plausible to me that the injurious effects of prolonged high intra-abdominal pressure may be prevented by permanent drainage of the abdomen, and that the obstructed circulation may compensate through collateral channels, and the functional derangements compromising life may be relieved. The sum of my personal experience is as yet too small to establish this method on a firm basis, and the two cases I have reported must be received with due allowance and consideration. It is my intention, as soon as the opportunity presents itself, to resort to permanent drainage in cases of ascites in which after one or two tappings the liquid rapidly re-accumulates. In abdominal dropsy from hepatic, renal and cardiac disease, from cancer and tuberculosis of the peritonæum, and chronic peritonitis, in cases of so-called idiopathic dropsy, and those due to severe malarial intoxication, I believe the method deserves a trial." In the discussion which followed the reading of this paper Dr. A. Jacobi, the president of the society, remarked that he had adopted this method in one case since hearing of Dr. Caillé's results, and he thought with benefit. He considered the method a good one, and would resort to it whenever a case came unde his observation.

In the May, 1885, issue of this journal (*Virginia Medical Monthly*), Dr. Hugh M. Taylor, of Richmond, Va., reports an attempt he made to secure permanent drainage in case of ascites by passing a tube through Douglas's cul-de-sac. After getting the tube safely in position it slipped out, and he was unable to re-introduce it. The ascitic fluid was drawn off, however, and for some days the opening from the vagina into the cul-de-sac was kept open, and continuous drainage secured for that length of time. Strange to relate, the fluid has never returned in this case. In commenting upon the merits of this method of treatment, Dr. Taylor remarks: "In ascites from obstructed vena cava, portal or hepatic circulation, or from imperfect circulation and action of the absorbents of the peritonæum, and in that from other causes, we finally arrive at a time when stimulation to greater activity of the skin, kidneys, and bowels fails to remove the fluid as fast as it forms, and paracentesis has to be resorted to. In a majority of such cases, it is usual to note a rapid and continuous improvement of the general health of the patient after each tapping, lasting until digestion, assimilation, circulation, etc., are again interfered with by the re-accu-

mulated fluid. It occurred to us that, if the fluid could in some way be continually drained off, we could maintain the point gained after the tapping; and though the remedial measure conceded to be only palliative, we would at least make the patient more comfortable, secure time in which to treat the cause of the ascites, and have a better prospect of success, inasmuch as we would have the patient's system in a more favorable condition to respond to treatment. We had seen the pleural sac opened and a drainage-tube worn for many months; we knew the pericardial sac had been tapped and drained, and in several instances weeks after an ovariotomy; we had seen the cul-de-sac of Douglas opened, a drainage-tube introduced, and for the same length of time the peritoneal cavity flushed out without, as far as we could tell, the least rebellion on the part of the peritoneum to the operative interference. No serious local or constitutional disturbance could be credited to the presence of the tube. This experience led us to believe that in some cases of ascites we could tap the peritoneal cavity through Douglas's cul-de-sac and by means of a drainage-tube worn constantly, drain off the fluid as fast as it forms."

Dr. Taylor has related to us a case which illustrates the tolerance of the peritoneum to interference. A case of ascites in an intemperate man, associated with cirrhosis of the liver, was recently placed under his care. The question of permanent drainage by a tube through the abdominal walls was discussed, but as a fatal issue seemed so near at hand, and would in all probability be reached before the fluid could again re-accumulate, it was not looked upon as a case in which a fair test of the method could be made. In discussing this point, the patient heard the remark made that if the hole that had just been made by the trocar could be kept open, he would be more comfortable. Without saying anything about it, when in a day or two the puncture began to close up, with a pair of scissors he began to stretch and keep it open, and continued to do so for ten days without exciting any inflammatory action. Finally, however, the opening was allowed to close, the fluid began to re-accumulate, and death followed in a week or two. His experiment confirmed the impression that a drainage-tube in this position would be tolerated, and if resorted to soon enough would at least prolong life and lessen suffering. We are satisfied that this is a subject which merits the attention of all advanced thinkers, and we find much in the papers referred to of interest to any practitioner.

Book Notices.

Manuel de Technique des Autopsies. Par BOURNEVILLE et P. BRICON. Paris: Librairie du Progres Medical. 1885. 32mo. Pp. 240. Paper. Price 3 francs. (From Authors.)

This brochure is to excite interest in the conduct of autopsies, etc., and to furnish better rules for performing them than are usually adopted. Part I considers the subject of practice of autopsies in France and abroad. Part II is devoted to the detail descriptions—instruments. mode of proceeding, precautions, external examinations, examination of special internal parts or organs, etc., beginning with those of the thoracic cavity. The work furnishes excellent guides, and is illustrated with sixteen figures and five plates. We most cordially commend this little book to coroners, pathologists, anatomists, and to those in general who may be called upon to make post-mortems.

Diseases of the Lungs, of a Specific, not Tuberculous Nature. By Prof. GERMAIN SÉE, Member of the Academy of Medicine, etc. Translated by E. P. HURD, M. D. With Appendix by GEO. M. STERNBURG, M. D., Surgeon U. S. Army, and Prof. DUJARDIN-BEAUMETZ. New York: William Wood & Co. 1885. 8vo. Pp. 398. (From Publishers).

This November volume, 1885, of Wood's Library, "treats especially of acute bronchitis, infectious pneumonia, gangrene, syphilis, cancer and hydatid of the lungs *not of a tuberculous nature.* The merit of the work may be forejudged by a knowledge of the eminent authors who contributed to it. It is more than usual a scientific study of the diseases just named, and seeks to study their nature through their causes. The peculiar arrangement of the chapters, and the manner of getting at the subjects considered, attract attention; but our want of space does not permit an attempt at further notice.

Clinical Notes on Uterine Surgery, with Special Mention of the Sterile Condition. By J. MARION SIMS, A. B., M. D., late Surgeon to the Woman's Hospital, New York, etc. New York: William Wood & Co. 1873. 8vo. Pp. 401. Paper. Price $1.00. (From Publishers.)

This "Memorial Edition" of the master-work of the immortalized "Father of Gynæcology" has just been issued by

the liberal firm of Messrs. William Wood & Co., who were honored as the publishers of the original edition. This work has now become historic, and has been translated into a number of languages, as it has formed the basis of the approved gynæcological doctrines of later days. We will attempt no citation of the contents of the volume before us, as they are familiar to most of our readers who held the friendship of the author, and whose name will ever be a household word in the home of every practitioner of medicine. We take pleasure in calling attention to this "Memorial Edition," and in naming the almost nominal price as one dollar.

Climatology and Mineral Waters of the United States. By A. N. BELL, A. M., M. D., Editor of *The Sanitarian*, etc, New York: Wm. Wood & Co. 1885. 8vo. Pp. 347. (From Publishers.)

The publishers of "Wood's Library" could not have made a more judicious selection of author for this October number, 1885, than Dr. Bell. The book treats of almost every prominent health resort in the United States, giving topography, composition of air, average temperature and moisture, and other special qualities of surroundings, of every section of the country. The work is simply invaluable to the travelling invalid, while it serves to instruct the physician as to his selection of places for a given class of patients. The book is also statistical in many respects, and thus is a material help to climatologists, etc. A full index facilitates ready references to subjects treated of in the work.

Manual of Operative Surgery. By LEWIS A. STIMSON, B. A., M. D., Professor of Clinical Surgery in University of City of New York, etc. Second Edition. With 342 Illustrations. Philadelphia: Lea Brothers & Co 1885. 12mo. Pp. 506. Cloth. Price $2,50. (From Publishers.)

This is a deservedly popular "Manual." Dr. Stimson has been a close observer, and is a fine practitioner. His descriptions are clearly made, and his selected operations are always the choicest. His teachings, as set forth in this book, will serve as a faithful guide to the practitioner who may at any time be called on to operate. There is no attempt at an exhaustive treatise on general surgery; but whenever he branches off on his chosen topic, his diagnostic hints are well put and reliable. We recommend the book without reserve.

Text-Book of Nursing. Compiled by CLARA S. WEEKS, Superintendent of Training School for Nurses, Paterson, N. J., etc. New York: D. Appleton & Co. 1885. 12mo. Pp. 396. Cloth. (For sale by West, Johnston & Co., Richmond.)

It gives us real pleasure to call the attention of our readers to this book, feeling that, if physicians and surgeons will read it themselves, and then cause those who may have to act as nurses to study its teachings and follow them, great good will be accomplished. By all means put this book in the hands of every one who is studying nursing the sick as an avocation, and every mother who has to act as nurse in her own family. About 300 pages are devoted to text directions, given in a plain, intelligible manner, with an explanation of the few technicalities that are proper. Where the text is insufficient, illustrations make clear the meaning. The section on Emergencies is invaluable. So as to master the subject, let the nurse study to answer each question in the Appendix pages. The index is very good.

Cutaneous Memoranda. By HENRY G. PIFFARD, A. M., M. D., Clinical Professor of Dermatology, University of City of New York, etc. Third Edition. New York: William Wood & Co. 1885. 32mo. Pp. 268. (From Publishers.)

We confess to a prejudice against the form of issue of this very valuable compendium of skin diseases. It is not a *pocket* manual, as claimed, because it feels too much like a flat bottle in the pocket. The pages are unwieldly, because of their size and the binding; and then, too, there is the annoyance of too rapidly turning the leaves. We feel that some very excellent material has been wasted because of the form of publication, for the matter of this text is what most physicians are anxious to be more informed about. Dr. Piffard's part has been well done.

Epilepsy and Other Chronic Convulsive Diseases—Their Causes, Symptoms, and Treatment. By W. R. GOWERS, M. D., F. R. C. P., Physician to National Hospital for Paralyzed and Epileptic, etc. New York: William Wood & Co. 1885. 8vo. Pp. 255. (For sale by West, Johnston & Co., Richmond.)

This September number, 1885, of "Wood's Library of Standard Medical Authors" treats of a class of subjects regarding which we daily see the need of more information by practitioners deserving of their reputations in other departments of Medicine. The author is well known as eminent

in neurological studies, and his publications are all standard, as they are practical in all their bearings. We have so often alluded to the great benefit done by the Messrs. Wood & Co, in issuing this Monthly Serial Library at the remarkably cheap price of $18 a year (for twelve distinct standard volumes) that it would be but repeating, almost to weariness, the advice to every one of our readers to subscribe regularly to it.

Essentials of Histology—Descriptive and Practical. By E. A. SCHAFER, F. R. S., Jodrell Professor of Physiology in University College, London, etc. Philadelphia: Lea Brothers & Co. 1885. 8vo. Pp. 255. Cloth. Price $2.25. (From Publishers.)

This "elementary text-book of histology" supplies "the student with directions for microscopical examination of tissues." It is illustrated by 281 wood cuts, showing what is revealed by the micoscope during a systematic course of study of practical physiology. The work is suited to its purpose exceedingly well, and will prove of value as a work of study and reference to the practitioner who may be interested in laboratory examinations. We think such a book loses some of its value or usefulness because of the lack of an index, although we recognize that a suitable index of of subjects in such a book would almost necessarily be very long. The table of contents may here serve as a substitute.

Practical Selections Respecting the Varieties of Electrical Currents, and the Uses of Electricity in Medicine. With Hints Relating to the Selection and Care of Electrical Apparatus. By AMBROSE L. RANNEY, M. D., Professor of the Anatomy and Physiology of the Nervous System in New York Post-Graduate Medical School and Hospital, etc. New York: D. Appleton & Co. 1885. 12mo. Pp. 147. (For sale by West, Johnston & Co., Richmond.)

This monograph is to form a chapter in the author's forthcoming work on Diagnosis and Treatment of Nervous Diseases. Not having space for a critical examination of the book just now, we insert its unabridged title as descriptive of its purpose and subjects. It is an invaluable treatise by a most capable and eminent author, and will prove of great benefit to the purchaser. It is properly illustrated by electrotypes of different batteries and appliances, and by plates indicating the points on the body for the application of the electrodes. We most cordially commend this little book to the practitioner.

Diseases of Sedentery and Advanced Life. By J. MILNER FOTHERGILL, M. D. Physician to City of London Hospital for Diseases of the Chest, (Victoria Park), etc. New York: D. Appleton & Co., 1885. 8vo. Pp. 296. (For sale by West, Johnston & Co., Richmond).

This is a "work for medical and lay readers." It is a brief medical review of life, beginning with childhood and then passing on to the medical aspects of adult life. Part III. is taken up entirely with the conditions of organs and diseases of advanced life, naming especially, albuminuria, gout, apoplexy, obesity, etc. While the work is thoroughly systematic in its medical teachings, still there is something specially attractive about the style which makes the book very readable because of the record of events and the "old people's way" of telling about what was and what is to come to pass. The young and the old alike will be profited by a careful perusal of this work.

Practical Surgery. By J. EWING MEARS, M. D. Lecturer on Praccal Surgery and Demonstrator of Surgery in Jefferson Medical College, etc. With 490 Illustrations. Philadelphia: P. B. Blakiston, Son & Co., 1885. 12mo. Pp. 794. Price, Cloth $3.75: (For sale by West, Johnston & Co., Richmond).

This second edition makes a revision so thorough as hardly to allow us to recognize the first edition of 1878. The work is, as its title implies, *practical*, and deals almost exclusively with operative procedures and preparations therefor, including surgical dressings, bandaging, treatment of fractures and dislocations, ligature of arteries, amputations, and excisions of bones and joints. Points of pathology and critical questions of diagnosis, prognosis, etc., are superficially treated; but presupposing for the most part that the diagnosis has been correctly made and an operation decided on, this book tells you by text how to do it, and presents numerous illustrations so as not to allow of a misunderstanding of the descriptions. It is a very servicable book to both practitioner and student, and has a tolerably good index.

Manual of the Diseases of Woman. By CHARLES H. MAY, M. D., Late House Physician at Mt. Sinai Hospital; Assistant to Chair of Opthalmology, New York Polyclinic, etc. Philadelphia: Lea Brothers & Co., 1885. 12mo. Pp. 357. (From Publishers).

Our author has evidently confined himself too much to a reprint of his quiz-class notes, which, however well arranged and understood by him and his classes, is too concise and

synoptical to serve as a "systematic exposition of the theory and practice of gynæcology for the use of [other] students and practitioners." For instance, in the section on Anatomy, etc., all he has to say of the meatus urinarius is that it is "the external opening of the urethra." His description of the urethra is alike vague, and does not help to locate the meatus—oftentimes a very important thing to know. The same obscurity or indefiniteness is found on almost every page of description of the diseases or conditions of woman. A good book might be written from the systematic headings he gives; but as he presents them we cannot recommend the purchase of the book, except by those who wish simply to add books to their gynæcological libraries.

Rationalism in Medical Treatment, or the Restoration of Chemism—the System of the Future. By WILLIAM THORNTON. Boston. Published by Author, 1885. Interleaved. 12mo. Pp. 48. Cloth. Price $1.00.

There are some books an editor wishes were not sent him for review, because he knows or finds nothing in them entitling them to publication, and this is one. We are reminded just here of the case in Texas: A very wicked, ungodly man died, and his friend went for the parson to preach his funeral. On their way back to the scene of the services, the parson asked his companion about the spiritual and moral character of the deceased, and was told, in brief, that he had been a devilish sort of a fellow all of his life. Hoping still to hear of *something* good about the fellow, he asked if the deceased had a single good trait of character of which he might tell the people. The companion, after some studious reflection, said, "Well, yes, pa'son, you may say he was a good shmoker." The binding, paper and printing of this book would do credit to any of our leading publishers.

Compend of the Practice of Medicine. By DANIEL E. HUGHES, M. D., Demonstrator of Clinical Medicine, in Jefferson Medical College, etc. Philadelphia: P. Blakiston, Son & Co. 1886. 12mo. Pp. 399. Leather. Gilt margins. Price $2.50. (For sale by West, Johnston & Co., Richmond.

The popularity of the "Compend of the Practice of Medicine" as published in Blakiston's Quiz Compend Series induced the author to present this book as the "Physicians Edition, including a very complete section on Skin Diseases." The "compend" consists in reality of a full set of notes on

the Practice of Medicine, and as such is useful as a ready reference book for the practitioner and is the very thing wanted by the student in reviewing his studies and in preparing for examinations. It is also an excellent guide book to be adopted by the lecturer. The principal standard works from which this "Compend" has been compiled are the most recent editions of Da Costa, Bartholow, Pepper, Flint, Loomis, Reynolds, Duhring, Roberts, etc. An almost perfect index is appended.

Venereal Memoranda. By P. A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases, University of City of New York, etc. New York: William Wood & Co. 1885. 32mo. Pp, 332. (From Publishers.)

If these "Memoranda" had been presented by the Publishers in more convenient size of page, they would have made a book that all practitioners would have been glad to have got. Dr. Morrow has written a very excellent compilation—presenting the latest practical formulæ, etc. His descriptions of the several venereal diseases are good, and the rules for diagnosing are clearly laid down.

Psychiatry—A Clinical Treatise on Diseases of the Fore-Brain, Based on a Study of its Structure, Functions and Nutrition. By THEODOR MEYNERT, M. D., Professor of Nervous Diseases, and Chief of the Psychiatric Clinic in Vienna. Translated (under authority of the Author), by B. SACHS, M. D., Instructor in Diseases of the Mind and Nervous System in New York Polyclinic. Part I. Anatomy, Physiology and Chemistry of the Brain. New York and London. G. P. Putnam's Sons. 1885. 8vo. Pp. 285. Cloth. Price $2.75. (For sale by West, Johnston & Co., Richmond).

This work by the great brain anatomist of the world, we cannot say exactly is essential to every practitioner's library; but whoever studies the book will greatly improve himself in knowledge of mental operations. The author thinks the term psychiatry—"treatment of the soul"—transcends the the bounds of accurate scientific investigation; so that, to give a functional designation to the morbid affections of the fore-brain, he would choose the term, "Diseases of the *Mind*." This book is divided into chapters on Structure and Architecture of the Brain, Minute Anatomy of the Brain, Anatomical Corollaries and Physiology of Cerebral Architecture, Nutrition of the Brain, and an Appendix on Mechanism of Expression.

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LANDON B. EDWARDS, M. D.....EDITOR AND PROPRIETOR.

Original Contributions solicited from all sections; but the Editor does not hold himself responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

Wanted—Warren's "Surgery for Field and Forest.

A liberal price will be paid for a copy of the *first* edition of "*Surgery for Field and Forest*," by Edward Warren, M. D. Address Dr. B. A. Watson, Jersey City, New Jersey, Box 94.

Medical Colleges in the United States.

From the well-prepared "Report of the Illinois State Board of Health, for 1885," just issued, some interesting statistical facts are to be gathered, which we summarize.

From 1765 to 1885, inclusive, there were established in the United States and Canada 233 chartered medical institutions for instruction of students, of which 218 were in the United States and 15 in Canada. Of these, 102 in the United States and 3 in Canada are extinct.

Confining our further synopsis of the report to the Colleges, etc., of the United States, we find of the total number of 218 established since 1765, that 145 were of the regular school, 22 were homœopathic, 31 eclectic, 4 physio-medical, 5 miscellaneous, and 11 fraudulent. At the present time, there are in existence in the United States 116 medical diploma-granting institutions, of which 89 are regular, 13 homœopathic, 11 eclectic, 1 physio-medical, and 2 miscellaneous. There are 4 of the 89 regular and 1 of the 13 homœopathic institutions for women only. Besides these, there are 42 Colleges open to both sexes. For colored stu-

dents only, there are 3 Colleges; 1 is open to all—"without distinction of sex or race."

"The most suggestive facts revealed by a study of the tables and data presented" in the Reporrt, are:

1. The number of medical colleges has not increased during the past year. There are 2 more regular schools than the year before, but there is 1 less eclectic and 1 less physio-medical.

2. The number of medical students and graduates decreased. There were 953 less students and 278 less graduates during the session of 1884–5 than during 1883–4. We present the tables of matriculates and graduates from institutions in the United States since 1881–'2:

MATRICULATES.

Session.	*Regular.*	*Homœop.*	*Eclectic.*	*Ph.-Md.*	*Mis.*—Total.
1881–2	10,157	1,162	946	60	... 12,325
1882–3	10,047	1,204	909	52	18 12,230
1883–4	10,092	1,105	733	85	26 12,013
1884–5	9,329	1,032	587	54	58 11,060

GRADUATES.

Session.	*Regular.*	*Homœop.*	*Eclectic.*	*Ph.-Md.*	*Mis.*—Total.
1881–2	3,772	368	319	22	... 4,481
1882–3	3,283	437	274	23	11 4,028
1883–4	3,296	398	227	17	13 3,951
1984–5	3,094	337	200	22	20 3,673

This decrease is attributable to (1) "hard times" since the great business prosperity throughout the country in 1882; (2) increasing desire to elevate the standard of graduation; and (3) enforcement of requirements in States which have enacted laws regulating the practice of medicine.

3. The more marked uniformity in the requirements of colleges.

4. The Illinois State Board has been greatly instrumental in breaking up every one of the 11 fraudulent institutions in the country that had charters prior to 1883–'4, and none now exist.

The "Schedule of Minimum Requirements" for the granting of license to practice medicine by the Illinois State Boards of Health (which has powers very similar to Boards of Medical Examiners in other States), it seems to us presents a sufficiently low standard for practical purposes; and yet how few in practice in other States attain to it! The following are the seven required conditions of an applicant for license in Illinois:

1. Good moral standing, and graduation from a good literary or scientific college or high school; or, lacking this, a thorough examination sufficient for a first grade teacher's certificate in mathematics, English composition and elementary physics and natural philosophy.

2. Branches to be included in the courses of instruction granting diplomas: Anatomy, physiology, chemistry, materia medica and therapeutics, theory and practice of medicine, pathology, surgery, obstetrics and gynæcology, hygiene, and medical jurisprudence.

3. The sessions of colleges granting recognizable diplomas must be twenty weeks or more, and two full courses of attendance in different years, with the title of Doctor of Medicine is required of the applicant.

4. Regular attendance upon such lecture sessions is required of each applicant, and he shall have had regular quizzies at least twice a week by his lecturers, and, when practicable, final examination by others than his professors.

5. Two courses of dissection, and two terms of clinical or hospital instruction.

6. Time of professional studies before graduation, under preceptor or otherwise, shall not be less than three full years.

7. The college must show that it has a sufficient and competent corps of instructors and the necessary facilities for teaching, dissections, clinics, etc.

Holders of diplomas from colleges which do not come up to his standard can legally enter practice in Illinois *only* by passing examinations before the Board of Health on the subjects of their schedule which are omitted by the colleges.

Southwestern [Va.] Lunatic Asylum.

It being apparent that additional accommodations for the insane were needed in Virginia, the General Assembly of this State, deeming it desirable to establish an asylum in the Southwestern section of the State, passed an act on the 14th of March, 1884, appointing a Commission, consisting of Dr. S. H. Moffett, Dr. R. H. Cox, F. Rorer, Esq., Prof. E. W. Nichols, Emory Burns, Esq., C. W. Statham, Esq., Colonel Thos. F. Goode, and Dr. H. Black, to select a suitable site for the said asylum at some eligible point west of New River, Va., and upon the condition that the county in which the asylum was located should donate to the State a suitable farm for that purpose. The Commission met and organized at Central Depot, in Montgomery county, on the 12th of June, 1884, and after visiting the several counties com-

peting for the prize, decided to accept the location near the town of Marion, offered by the citizens of Smyth county, at a cost to them of nearly $30,000—an evidence of the public spirit prevailing in that small county.

The location selected possesses a combination of advantages rarely found. The site is upon a handsome plateau commanding extensive and beautiful views up and down the Holstein river, with rare specimens of mountain scenery on each side of the Valley. The drainage can be made perfect at small expense, and the great desideratum of an abundant water supply is fully met. The water is the purest freestone, flowing from two groups of mountain springs so elevated that it will flow by gravity to the foundation of the buildings, and then rise eighty feet, thus affording a constant and abundant supply through the institution. The building site is less than a half mile from the Norfolk and Western railroad, and from the young manufacturing and thrifty town of Marion, the county-seat of Smyth county, Va.

The Legislature, at its extra session, accepted the work of the Commission, and on the 24th of November, 1884, appointed a Building Committee, consisting of Dr. H. Black, Chairman, Hon. J. Hoge Tyler, Capt. D. D. Hull, Dr. John S. Apperson, N. L. Look, Esq., F. B. Hurt, Esq., and Col. Thos. J. Boyd (whose place was subsequently filled by Hon. S. H. Williams), who were empowered to procure suitable plans for the buildings, and let them to contract. The Committee entered upon its duties in January, 1885, and after devoting much time to the consideration of numerous plans submitted by competing architects, and visiting a number of asylums, the largest and best equipped in the United States, finally adopted the plans submitted by the McDonald Brothers, architects of Louisville, Ky.

The buildings were let to contract in June, and when the winter set in, the work had progressed so far that its completion may be expected by the 1st of January, 1887—the time specified in the contract.

The Legislature, in addition to the $27,000 appropriated by the last Legislature to procure plans and commence the work of building, has just passed an act appropriating $135,000, of which $75,000 is to be applied to the completion of the buildings, $30.000 to be disbursed by the Building Committee in obtaining the water supply, heating apparatus, lights, drainage, etc., and $30,000 by the Board of Directors—yet to be appointed—in furnishing, equiping and opening the

institution for the reception of patients—not later, it is expected, than the 1st of March, 1887.

The Committee, fully appreciating the fact that in a few years increased accomodations will be needed in addition to the 210 patients now being provided for, have wisely and economically made their designs, at the outset, on a scale commensurate with the future needs of the institution. The administrative building and water supply will be sufficient for 600 or 800 patients, and future extensions can be made at comparatively small expense beyond its cost of buildings and furniture.

From this rather lengthy history of this institution, it will be seen that it will soon take its place along with the other great charities of the State. Its superior natural advantages, together with the opportunity to introduce the modern improvements and appliances, ought to make it a model State institution.

New York Polyclinic.

The report of the Secretary of this pioneer School of Clinical Medicine and Surgery for practitioners at the annual meeting of the Directors and Faculty, held at the College building on January 28th, 1886, showed an attendance upon the clinics in that institution since the opening on November 7th 1882, of 709 physicians. Of this number 156 had taken out the general ticket which admits the holder to the lectures in all the departments taught at the school. The ratio of attendance upon the various departments is shown in the following list of tickets sold since November 1882, up to January 20th, 1886. Gynæcology 461, Surgery 412, Medicine 313, Throat, Nose and Ear, 300, Children, 273, Eye, 250, Skin, 234, Mind and Nervous System, 207, Physiological Chemistry, 73, Obstetrics, 163, Pathology (laboratory only recently opened) 15—Total 2801. The attendance for the present session is in excess of any previous term. This is a very encouraging report, and speaks well for the profession of practitioners of Medicine throughout the country, that they are anxious to keep themselves bright in their studies. The Faculty of this pioneer school is composed of men *eminent* in the profession, and better *teachers* could scarcely have been selected anywhere. We commend the New York Polyclinic to all our medical friends who wish a little "brushing up," or who are seeking to establish "special practices."

Messrs. Purcell, Ladd & Co.

This wholesale drug house, by their enterprise and continuously full stock of drugs, etc., adds very materially to the business reputation of our city. Beside increasing their own facilities for manufacturing standard preparations required by the apothecary, their "jobbing business" is so extensive that they can furnish on demand most of the articles advertised by our other advertisers, for many of whom they are the Virginia agents.

Obituary Record.

Dr. Meade C. Kemper

Was found dead in his bed in Norfolk, Va., on the morning of February 23rd, 1886. He was born during the latter part of 1856, and hence was 29 years of age at the time of his death. He was the son of ex-governor James L. Kemper, of Madison county, Va., and graduated in medicine from the Medical College of Virginia when just 21 years old. In a year or so afterwards he married, and moved to Goshen, Rockbridge county Va., where he was engaged to take medical charge of the hands in some of the mines. A year or two later, he was afflicted by the death of his wife and infant. His contract engagement having expired he moved to Norfolk, Va., about January 1885, where he entered upon private practice; and by his studious habits and many excellences of personal character he made rapid growth in professional reputation. So well established had he become in professional renown throughout the State, that during the session of the Medical Society of Virginia, September, 1885, when it was thought that a vacancy existed on the State Board of Medical Examiners, he was elected to fill that vacancy—one of the most responsible and complimentary positions in the gift of the State profession. But even when thus honored, on being informed that his election had been due to a misrepresentation of his competitor's position, he promptly declined to receive the commission, with the manly statement: "I am not a little indignant that my personal friends could have been so mistaken in me as to suppose that I was willing to profit by a vile slander upon a professional brother."

Dr. Kemper's death is a severe blow to his wide circle of friends. He was a good physician, and as a friend was gen-

erous to a fault. As a leader he was dauntless, but when the victory was won he was bravely conciliatory and forgiving in disposition.

We had the pleasure of meeting Dr. Kemper in Norfolk, a week before his death, and shared his hospitalities. Then he seemed to be in perfect health. The surprise at his sudden death was a shock to all his friends. His remains were removed to Madison C. H., Va., and buried in the family cemetery.

The following letter from Dr. Wm. H. Shepherd, will be read with interest.

Feb. 24th, 1886.

Dr. L. B. Edwards, *Ed. Va. Med. Monthly*,

Dear Sir:—Whatever throws any light upon the appalingly sudden death of our late medical brother, Dr. Meade C. Kemper, will be of interest to you, and to the readers of the journal. On or about the 16th inst., Dr. Kemper came to consult me in reference to a sudden return of a bowel disturbance (dysenteric, in character) from which, as you know, he had recently severely suffered.

I advised the employment of a large dose (25 or 30 grs.) of the tannate of bismuth, repeated *pro re nata*. On the following morning, he called and informed me that the remedy had perfectly relieved him. I do not think that he again suffered from the dysentery, as I heard no further complaint, though in his company every day (without a solitary exception) from that time to the day of his death. On the afternoon of Monday, the 22nd inst., he came into Masi's drug-store, between six and seven o'clock, and I became aware of his presence by hearing him say to Mr. Masi, that he wished to see Dr. Shepherd. I turned at once from the party with whom I was conversing and asked what I could do for him. He told me that he had been suddenly attacked with a most violent and excruciating pain in the præcordial region, which had greatly alarmed him. He informed me that there had been nothing in his diet to account for the attack. Seeing his anxiety, I suggested the probability of the trouble being nothing more serious than a pleurodynia, or intercostal neuralgia, and at the same time, examined his pulse, he standing with his back touching lightly the show-case in his rear. After a pause of a few seconds, he inquired as to the state of his pulse. I had found this normal, with the exception of being slightly hurried. I then requested him to retire behind the prescription counter, and upon his taking a seat, I made a very cursory examination of his heart's action, and said to him: "As

heard through the two under garments, your heart-sounds are normal." The rhythm was normal, and I detected only a slightly muffled condition of both sounds—such as I thought would naturally be heard with the two shirts intervening. I proposed that we should go into my office (immediately overhead), and I would there make a careful, stethoscopic examination. He decided that this course was not necessary, and I left him, with the suggestion that he employ chloroform liniment in case of any return of pain. I never saw him again living.

I was shocked beyond expression at a message, which I received about 9 25 the following morning, requiring me to go at once to Dr. Kemper's room, as he had been found dead in bed. The surroundings showed plainly that he had gone to bed, after making his usual preparation, and after reading some portion of his Bible, had last been engaged in reading a pamphlet, which was left upon the bed within reach of his hand. He died, I must think, very suddenly and without the slightest struggle. His last medical service was with me, in the management of a very severe case of double pneumonia, to which I had invited him. Only a few days before his death, I received his professional services in my own case. His medical brethren, as well as the general public, will most sadly feel the loss which has so unexpectedly come upon us. Respectfully Yours,

W. H. Shepherd, M. D.

Dr. J. P. Smith.

This notice of the death of Dr. Smith was prepared by Dr. W. L. Baylor, of Petersburg, Va., who would have sent it in sooner, but had hoped some one else would have prepared it. Dr. Baylor's affection for the memory of his deceased friend is the apology for this late notice.

Died November 29th, 1884, Dr. J. P. Smith, near Millwood, Clarke county, Va. He was full surgeon in the Confederate States Army, and filled several offices of trust. At one time he was Medical Inspector of Jackson's Corps, and at the time of the evacuation of Petersburg he was the President of the Board of Examiners for the furlough and discharge of soldiers. The writer served under him in hospital; later, with him as one of the above-named Board, and can testify to his efficiency and courtesy as an officer, while as a man, he was a noble old Roman.

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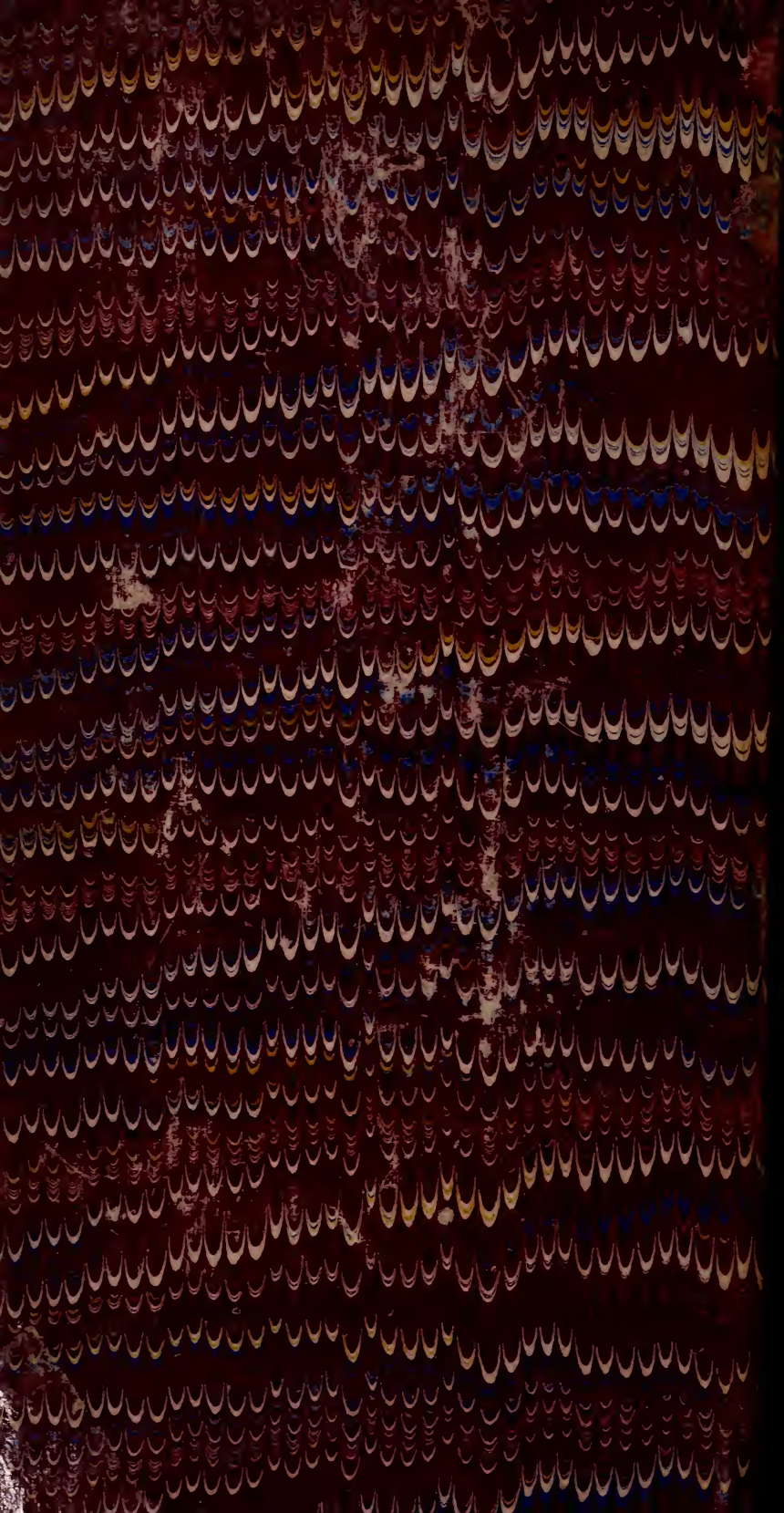
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